

FIN

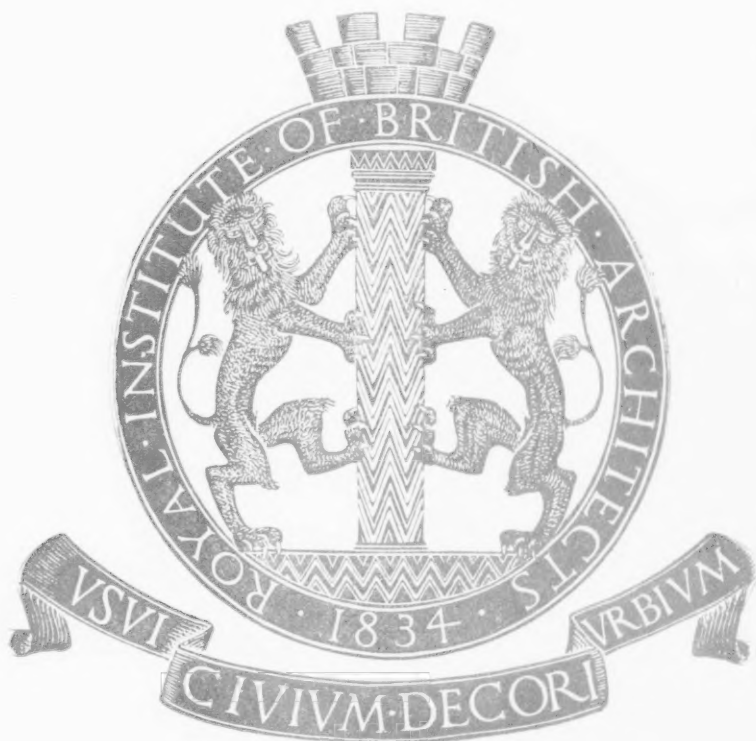
STACK

VOL. 50 THIRD SERIES No. 12

OCTOBER 1943

PUBLIC LIBRARY
NOV 23 1943
DETROIT

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS



LONDON

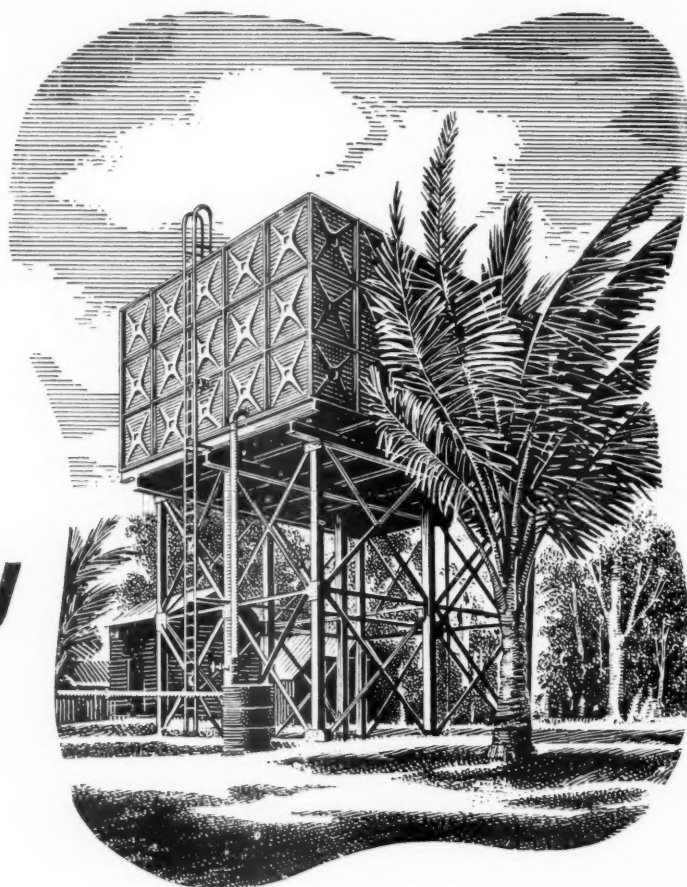
No. 66 PORTLAND PLACE W.1

PRICE ONE SHILLING & SIXPENCE



*for every
storage
need*

there's a . . .



Braithwaite Pressed Steel Tanks are in use all over the World. Built up from standard unit sections, they can be erected at ground level or on supporting structures to suit any site however restricted or difficult of access. For further details you are invited to apply for a copy of the latest Braithwaite Pressed Steel Tank Brochure.

B R A I T H W A I T E
P R E S S E D S T E E L T A N K

BRAITHWAITE & CO. ENGINEERS LTD. 16 KINGS HOUSE, 10 HAYMARKET, LONDON, S.W.1

Telephone: Whitehall 3993

"In what time . . . ?"

When insulation of a building is considered the question must be asked—and answered—*"In what time will the resulting economies repay the extra cost (if any) of the insulation?"* The answer will depend on construction, cost of insulation, cost of heating plant, price of fuel, temperature requirements and so on.

The following table is compiled from Table 1 and Chart 2 of Bulletin No. 12—"Thermal Insulation of Buildings" issued by the Ministry of Fuel and Power. It relates to the lining of typical wartime constructions with $\frac{1}{2}$ inch Insulating Board, with air space. "Cost of insulation" figures are per 1,000 sq. ft.

Construction	Thermal Transmittance			Increase or decrease of cost of Insulation over Savings on Heating Plant	Number of years in which fuel saving pays for extra cost of insulation
	Uninsulated	Insulated	Reduction		
Corrugated iron roof	1.5	0.32	1.18	£24 saving	—
Corrugated asbestos cement roof ..	1.4	0.32	1.08	£17 10s. "	—
Corrugated iron wall	1.2	0.31	0.89	£6 "	—
Corrugated asbestos cement wall ..	1.15	0.30	0.85	£4 "	—
$\frac{1}{4}$ in. Flat asbestos cement wall ..	0.89	0.28	0.61	£12 extra	1½ years
4 in. Concrete roof ..	0.68	0.26	0.42	£24 "	4 "
4 in. Concrete wall ..	0.64	0.25	0.39	£25 "	5 "
4½ in. Brick wall ..	0.64	0.25	0.39	£25 "	5 "

In practically all heated "single-skin" buildings the savings in initial cost of central heating plant outweigh the cost of insulation, as the savings in labour in manufacturing and installing heating plant exceed the labour used in insulation. In all types of buildings in general use to-day the money saved on fuel repays the extra cost of insulation in a few years.

"...and with what efficiency?"

But there is another aspect of insulation—probably of greater National importance—its effect on the efficiency of workers. If, through inadequate or badly distributed warmth, or cold draughts precipitated by uninsulated surfaces, the output of workers in factory or workshop is reduced by 5 per cent. during the cold months of the year, the loss is equal to one week's output per annum. How many times would the value of one week's output exceed the cost of adequate insulation? . . . And can the country afford to lose the output?

Supplies of $\frac{1}{2}$ inch Insulating Board are available for insulating approved buildings of essential character. We welcome enquiries for lining new or existing buildings by our latest SPECIALISED CONSTRUCTION methods. Our advice is at your service.

TENTEST FIBRE BOARD CO. LTD., 75 CRESCENT WEST, HADLEY WOOD, BARNET, HERTS.

Telephone: BARnet 5501 (5 lines)

Telegrams: Fibboard, *Phone, London

Colour in Building

All our labour is now needed to make only those materials urgently wanted for war purposes, but when the war is over we shall make "Cullamix" again. Then colour can be used for beauty instead of camouflage, and we believe that "Cullamix" will play its full part.

'Cullamix'

COLOURED CEMENT & AGGREGATE

THE CEMENT MARKETING COMPANY LTD.
The Club House, Coombe Hill, Kingston-on-Thames.

Something

NEW

a real
**Watertight—
Fume-proof—
Corrosion-proof—
All-insulated—**



5-amp. Switch

(Patent No. 541827. Gt. Britain, R.D. 838410)

A single pole one-way switch for use with 1/.044" or 3/.029" flat twin T.R.S. or metal sheathed cable, also for use with screwed conduit up to 3/4" diameter.

Full particulars available on request, please ask for leaflet 795 R

CALLENDER'S CABLE & CONSTRUCTION CO. LTD. HAMILTON HOUSE, VICTORIA EMBANKMENT, LONDON E.C.4

All over the World

BRICK *or* - ?

THE SELECTION OF MATERIALS for post-war building will be influenced by various factors. Fitness-for-purpose, durability, weathering properties, maintenance costs . . . these and other considerations will determine the construction and facings of our new buildings.

Among contemporary materials, *Good Bricks* have much in their favour. They are adaptable to practically any type or class of building. They can be colourful or sombre, textured or smooth, and are equally at home in "period" or ultra-modern schemes.

Good Bricks have nothing to fear from time or weather; they impart exceptional and lasting strength to a structure, and carry their own permanent exterior finish.

Good Bricks always look Good!

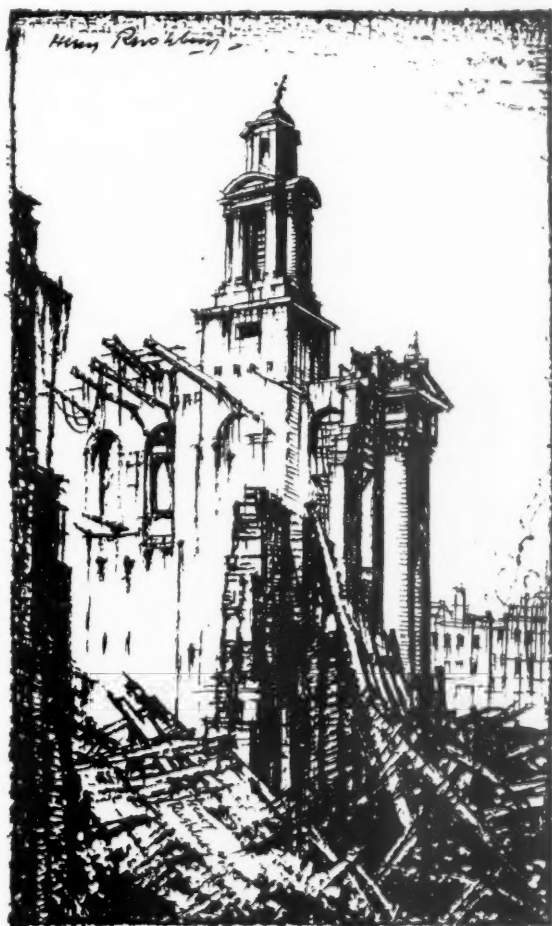


Published in the interests of Good Brickwork by the makers of

ACCRINGTON "NORI" BRICKS

ACCRINGTON BRICK & TILE COMPANY, ACCRINGTON - - - ACCRINGTON 2684

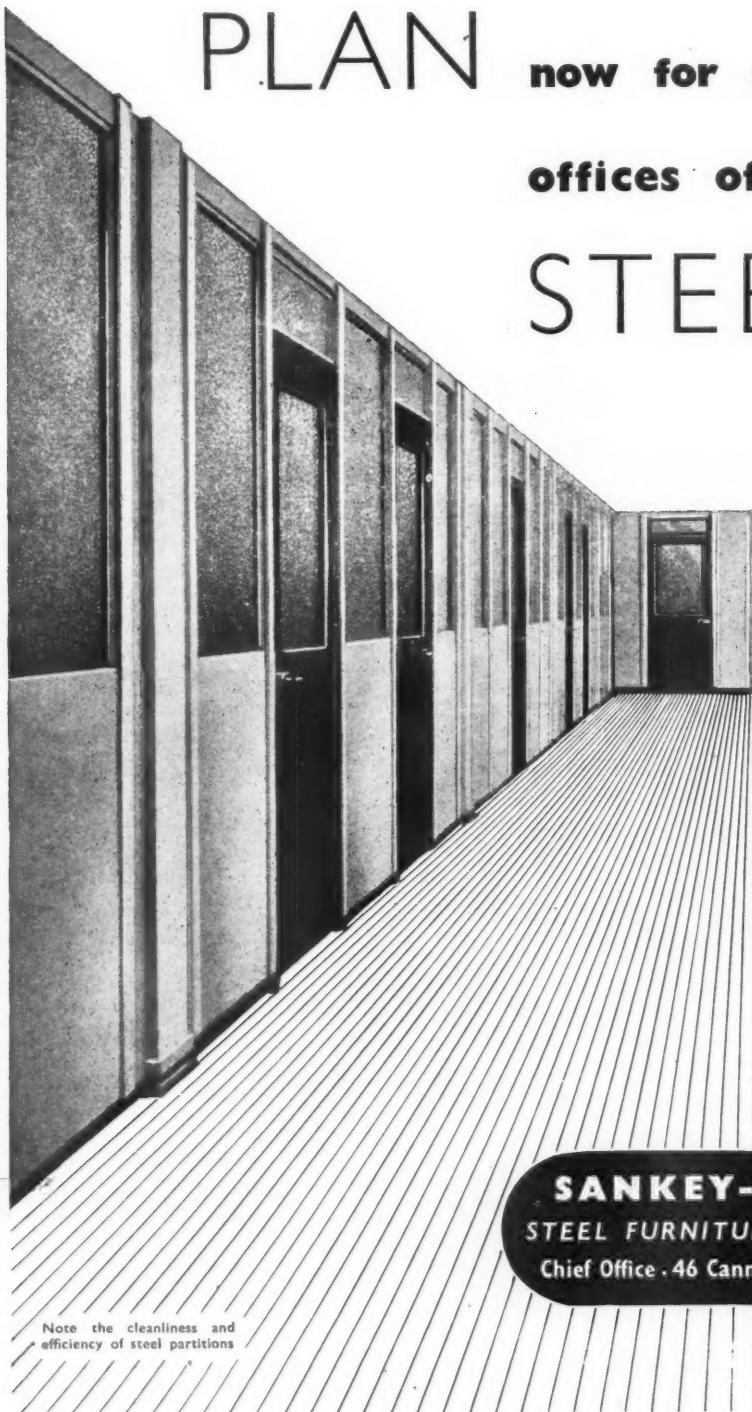
CRITTALL WINDOWS



WHEN YOU
REBUILD

THE CRITTALL MANUFACTURING CO., LTD., 210, HIGH HOLBORN, W.C.1

PLAN now for adjustable offices of STEEL



Note the cleanliness and efficiency of steel partitions

● The organisation of every business is subject to change. Particularly will it be so in days ahead. It is wise to provide office and factory layouts that can readily be adapted to these changing needs. Sankey-Sheldon Movable Steel Partitioning enables you to do this.

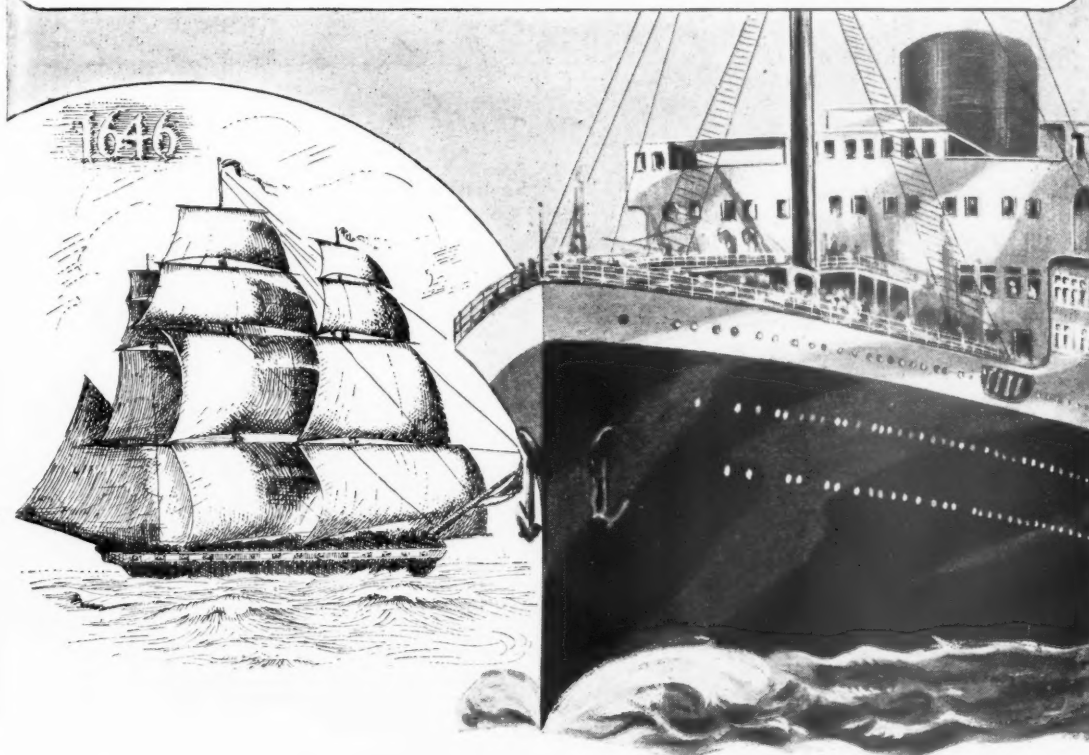
● The standard sections, which are smart, solid (but not clumsy) and dignified in appearance, are easily moved, yet the structure is always rigid and strong. In addition it is fire-resisting, hygienic, is reasonably priced, and the finish, which can be cleaned like a car, lasts indefinitely. Consult Sankey-Sheldon on all steel equipment.

SANKEY-SHELDON
STEEL FURNITURE & EQUIPMENT
Chief Office · 46 Cannon Street, London, EC4

Also Harris & Sheldon Ltd. Makers of Shops.

Enquiries to Sankey-Sheldon, Department J.R.,
46 Cannon Street, London, E.C.4.

PAINT PROGRESS *through the Ages* (4)



THE old Frigate of 300 years ago was the fastest vessel then afloat. Much of its efficiency was due to the constant care and attention lavished on it by Captain and crew. Paint played a most important part then, not just for appearance, but for the protection it gave to the constant exposure to all types of weather. Today, the fast, modern liner has proved itself in peace and war. The life-blood of our Island depends upon it—and its

efficiency and speed must never be allowed to deteriorate. Here again, Paint is essential even more than in the days of the "wooden walls." The quality, and types, of Paint have improved just as the Liner has outstripped the Frigate—though not so spectacularly. The Paint Industry is one of the oldest in the world, but it has always kept pace with the times, and in the forefront has always been the "House of Pinchin Johnson."

Pinchin Johnson

Makers of Fine Paints, Enamels, Varnishes, etc. since 1834

WITLEY COURT, WITLEY, SURREY

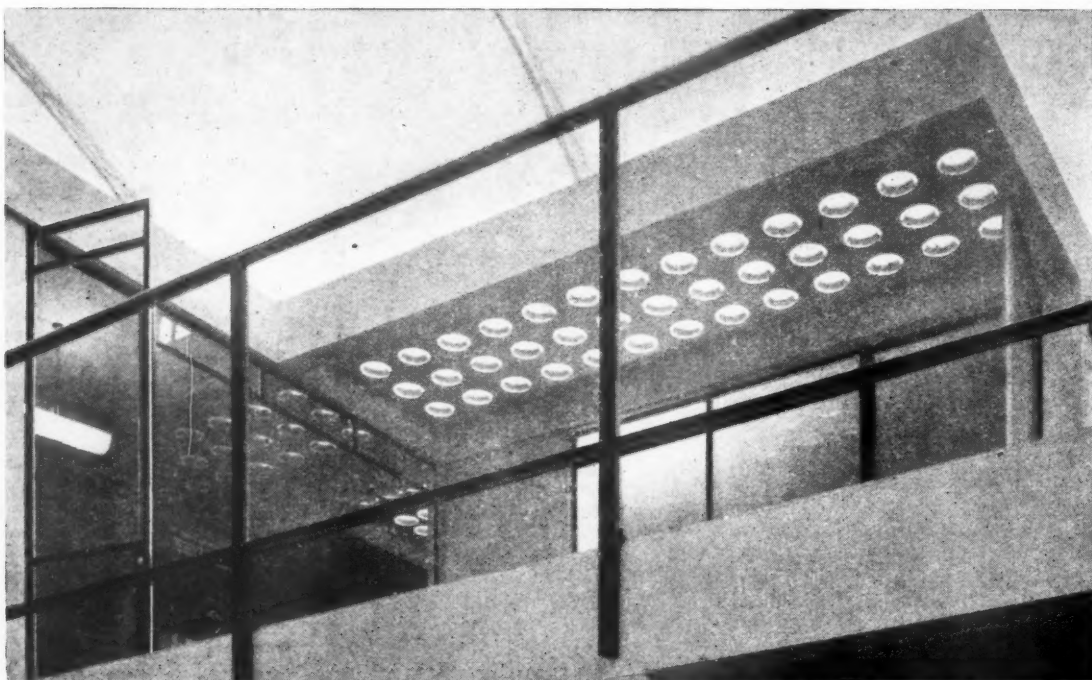
Telegrams: PINCHIN, WORMLEY, SURREY

Telephone: WORMLEY, SURREY, 280-284

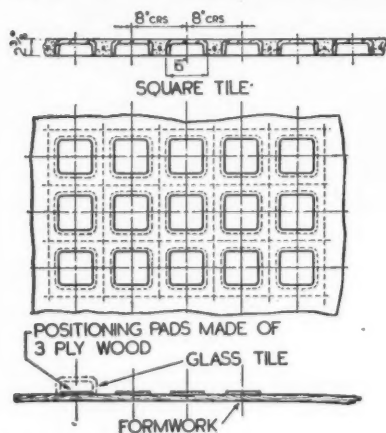
London Office: 6, ARLINGTON STREET, S.W.1 (Telephone: REGent 0881)

FACTS ABOUT GLASS FOR ARCHITECTURAL STUDENTS

USES "Armourlight" —No. 9 Toughened Lenses



A sun balcony in reinforced concrete, by courtesy of Lenscrete Ltd.



Three types are available:
 SQUARE TYPES:—T.401. $4\frac{1}{2}'' \times 4\frac{1}{2}'' \times 2''$ deep
 T.601. $6'' \times 6'' \times 2\frac{1}{2}''$ deep
 CIRCULAR:— T.702. $7''$ diameter $\times 2\frac{1}{2}''$ deep

"ARMOURLIGHT" Toughened Lenses are specially designed for translucent concrete construction. They have an exceedingly high resistance to mechanical loads and severe thermal conditions, and will withstand an impact test approximately 10 times as great as an annealed tile of similar shape and of twice the thickness.

"ARMOURLIGHT" Toughened Lenses are used in the construction of flat, domed or arched roof lights and canopies. They can also be fitted in precast reinforced concrete panels for vertical light construction.

The introduction of "ARMOURLIGHT" Toughened Lenses in solid reinforced concrete balconies to flats, permits a certain amount of light to be transmitted to the windows below.

This is published by Pilkington Brothers Limited, of St. Helens, Lancashire, whose Technical Department is always available for consultation regarding the properties and uses of glass in architecture.

LONDON OFFICE AND SHOWROOMS AT 63 PICCADILLY, W.1. • TELEPHONE: REGENT 4281
 where architectural students may get advice and information on all questions relating to the properties of glass and its use in building.



YOU HAVE A PROBLEM
IN AIR CONDITIONING
VENTILATING OR
HEATING, CONSULT
THE EXPERTS

Cheethams

OF OLDHAM

HEATING AND VENTILATING ENGINEERS.

H. CHEETHAM & CO. LTD.
MANCHESTER St., OLDHAM
'PHONE: MAIN 3881-2-3
'Grams: 'HYGROLIT' OLDHAM

Specialists in all
branches of A.R.P.
Engineering Work

**CENTRAL HEATING
AND
AIR CONDITIONING**

**ROSSER
AND
RUSSELL
LIMITED**

30-31 Conduit Street, W.1.

'Phone: Mayfair 8382.

|| Bank Low Mills, Marsh Lane,

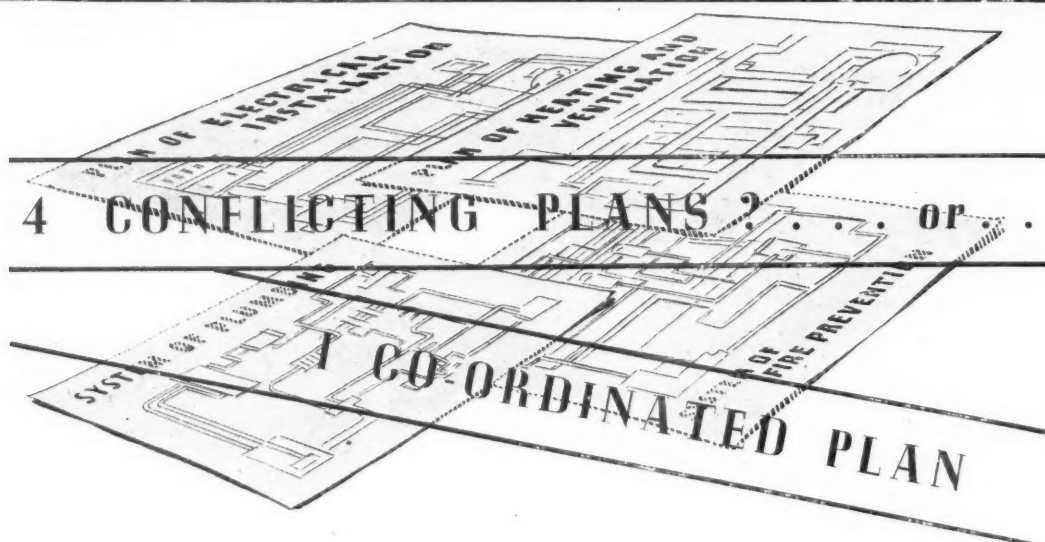
Leeds 9. 'Phone: 20911.



Scientifically designed G.E.C. fittings enable the fullest benefit to be obtained from Fluorescent tube lighting.

The best light distribution and proper intensity for given conditions, simple installation, easy maintenance, full protection for control gear, wiring and tube—are all features which have been admirably combined in the G.E.C. unit illustrated (No. 16957). A design which ensures the reflector being evenly lighted along its entire length, since the ends of the tube project through the ends of the reflector into the cover which also encloses the lead to the holder.

This unit is arranged for suspension at 24 in. centres.



Is it logical? . . . is it efficient? . . . is it economical? . . . that the Electrical Installation, the Heating and Ventilating, the Plumbing, the Fire Services should each be planned and executed by entirely separate organisations, each working in its own way?

Believing that the answer is "No," four of the leading organisations in these spheres have formed a new service to act as a "trouble filter" to the architect or consulting engineer, providing him with one co-ordinated plan in the place of four separate ones . . . offering in one service the combined experience of the four directorates. Such co-ordination will be of the utmost importance in speeding the great reconstruction to come . . . and the time to make the necessary arrangements is NOW.

YOUNG, AUSTEN & YOUNG LTD.

Heating & Air Conditioning Engineers

F. H. WHEELER & CO. LTD.

Electrical Engineers,

AUTOMATIC SPRINKLER CO. LTD.

Fire Control Services

RICHARD J. AUDREY LTD.

Sanitation & Plumbing

THE CO-ORDINATED INSTALLATION SERVICE

LONDON · LEICESTER · MANCHESTER · LIVERPOOL · BIRMINGHAM · NOTTINGHAM AND BOURNEMOUTH

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS

3rd Series]

[Vol. 50

No. 11

OCTOBER 1943



Towers and walls of the Joseph-Volokolamsk Monastery. Founded in 1479, it was one of the central seats of Russian mediæval philosophical studies. The Monastery was largely destroyed by the Germans in 1941 and the collections of the museum carried off to Germany. Below is a photograph of one of the belfry towers to-day.



CONTENTS

	PAGE		PAGE
JOSEPH-VOLOKOLAMSK MONASTERY	273	BOOK REVIEWS	286
JOURNAL	273	REVIEW OF PERIODICALS	288
THE PRE-FABRICATED HOUSE IN SWEDEN. ANDERS TENGBOM ..	275	NOTES	292
"REBUILDING" OUR URBAN FAUNA. COLIN MATHESON ..	279	OBITUARY	294
HOUSE CONSTRUCTION OF A DEFINITE LIMITED LIFE ..	282	MEMBERSHIP LISTS	294
TWO IMPORTANT BOOKS ON PLANNING. GORDON STEPHENSON ..	283	NOTICES, MEMBERS' COLUMN	296
PRINCIPLES OF NATIONAL PLANNING (REVIEW). G. R. ..	285		

Journal

SIR IAN MACALISTER'S RETIREMENT

Sir Ian MacAlister retires from the office of Secretary of the R.I.B.A. at Christmas. Sir Ian first became Secretary in 1908 and has seen the Institute through the greatest years of its development: the organisation and consolidation of the world-wide structure of Allied Societies, the development of the system of architectural education under the aegis of the Institute throughout the world and the great battle of Registration.

It is proposed to mark his retirement in an appropriate fashion—notice of which will be published in a forthcoming issue of the JOURNAL.

ARCHITECT MAYORS

Two prominent members of the R.I.B.A. have been elected Mayor for the coming year. Councillor R. Ridley Kitching [F.], in Middlesbrough and Councillor Samuel Taylor [F.], in Burnley.

Councillor Kitching has been a member of the Town Council since 1932 and since he started work in Middlesbrough as an architect in 1900 has been prominently connected with many sides of Middlesbrough civic life. At present he is chairman of the Town Council's Housing Committee.

In Burnley Councillor Taylor is senior partner in the firm of Samuel Taylor, Son & Platt. He is President of the Burnley and

District Society of Architects, and on the Council of the Manchester G.A. He has been a member of the Town Council since 1930.

H. CHALTON BRADSHAW [F.]

The sudden death of Mr. H. Chalton Bradshaw, in his office at the Royal Fine Art Commission, on Friday, 15 October, is a loss to the profession of one of its ablest and most charming members. The news of his death has come just as this issue of the JOURNAL goes to press and there is no opportunity now of making more than this brief reference. Bradshaw, who had been Secretary of the Royal Fine Art Commission since its establishment, was a graduate of the Liverpool School and the first holder of the Rome Scholarship in Architecture. He had been closely associated with the work of the R.I.B.A. over many years and was particularly active in the service of architectural education as a member of the Board of Architectural Education, as Hon. Secretary of the Faculty of Architecture of the British School at Rome and as a member of the Council and Board of Architectural Education of the Registration Council. In the earlier part of the war Bradshaw was on the staff of the Ministry of Works and Planning until the renewed activity of the Royal Fine Art Commission brought him back fully into his tasks as Secretary. In the next number we hope to include a fuller memoir.

R.I.B.A. COUNCIL, 1943-1944

The following is the constitution of the Council for the Session 1943-1944 :

President

Percy Thomas, O.B.E., Hon. LL.D., J.P. (Cardiff).

Past President

H. S. Goodhart-Rendel.

Vice-Presidents

A. C. Bunch (Warwick).

Stanley Hamp.

C. G. Soutar (Dundee).

J. Hubert Worthington, O.B.E. (Manchester).

Hon. Secretary

Michael Waterhouse, M.C.

Hon. Treasurer

L. Sylvester Sullivan.

Members of Council

Professor Patrick Abercrombie, M.A.

Victor Bain (Leeds).

Percy J. Bartlett (Nottingham).

A. C. Bunch (Warwick).

C. Cowles-Voysey (Winchester).

C. Lovett Gill.

Stanley Hamp.

G. Noel Hill (Manchester).

Dr. Charles Holden.

T. Cecil Howitt, D.S.O. (Nottingham).

L. H. Keay, O.B.E. (Liverpool).

Edward Maufe, A.R.A.

J. Nelson Meredith (Bristol).

Howard Robertson, M.C.

C. G. Stillman (Chichester).

John Swarbrick (Newcastle-on-Tyne).

E. P. Wheeler.

G. Grey Wornum.

Associate Members of Council

R. A. Duncan.

Professor W. G. Holford.

R. D. Manning (Thetford).

Anthony Minoprio.

Norval R. Paxton, M.C. (Leeds).

E. Berry Webber.

Licentiate Members of Council

Stanley A. Heaps.

C. Bertram Parkes (Birmingham).

S. Lunn Whitehouse (Birmingham).

Representatives of Allied Societies in the United Kingdom or Eire

- (1) *Six Representatives from the Northern Province of England :—*
R. Norman Mackellar (Northern Architectural Association).
H. T. Seward (Manchester Soc. of Architects).
T. M. Alexander (Liverpool Architectural Society).
C. Oliver (York and E. Yorks. Architectural Society).
Alderman Wm. Illingworth (West Yorks. Soc. of Architects).
Stephen Welsh (Sheffield, S. Yorks. and Dist. Soc. of Architects and Surveyors).
- (2) *Five Representatives from the Midland Province of England :—*
Cyril F. Martin (Birmingham Architectural Association).
J. O. Thompson (Leicester and Leicestershire Soc. of Architects).
H. F. Traylen (Northants, Beds, and Hunts Architectural Association).
H. H. Dawson (Nottingham, Derby and Lincoln Architectural Society).
Theo. G. Scott (East Anglian Soc. of Architects).
- (3) *Six Representatives from the Southern Province of England :—*
John Challice (Devon and Cornwall Architectural Society).
J. Ralph Edwards (Wessex Society of Architects).
J. T. Saunders (Berks, Bucks and Oxon Architectural Association).
A. E. Geens (Hants and Isle of Wight Architectural Association).
Herbert Kenchington (Essex, Cambs, and Herts Soc. of Architects).
John L. Denman, J.P. (South-Eastern Soc. of Architects).
- (4) *Four Representatives of Allied Societies in Scotland :—*
L. W. Hutson.
J. R. McKay.
A. G. R. Mackenzie.
John Wilson, O.B.E.
- (5) *One Representative of Allied Societies in Wales :—*
Ernest E. Morgan.
- (6) *Two Representatives of Allied Societies in Ireland :—*
W. Howard Cooke (R.I.A. of Ireland).
Frank McArdle (R.S. of Ulster Architects).

Representatives of Allied Societies in the British Dominions Overseas

Gordon McL. Pitts (R.A.I., Canada).

L. Sylvester Sullivan (R.A.I., Canada representative in United Kingdom).

Professor A. S. Hook (R. Australian I. of A.).

W. H. Ansell (R. Australian I. of A. representative in United Kingdom).

H. L. Massey (New Zealand I. of A.).

Howard Robertson (New Zealand I. of A. representative in United Kingdom).

D. S. Haddon (Inst. of S. African Architects).

E. Berry Webber (Inst. of S. African Architects representative in United Kingdom).

S. H. Parelkar (Indian Inst. of Architects).

A. J. A. Illingworth (Indian Inst. of Architects representative in United Kingdom).

Representative of the Architectural Association

A. F. B. Anderson.

Representative of the A.B.T. (formerly A.A.S.T.A.)

V. L. Nash.

Chairman of the Board of Architectural Education

Stanley C. Ramsey.

Chairman of the R.I.B.A. Registration Committee

Darcy Braddell.

Chairman of the R.I.B.A. Official Architects Committee

J. H. Forshaw, M.C.

Representative of the R.I.B.A. Salaried Members Committee

W. E. Brooks.

Chairman of the Allied Societies Conference

C. G. Soutar.

THE PRE-FABRICATED HOUSE IN SWEDEN

By ANDERS TENGBOM, Member, Svenska Arkitekters Riksförbund



To left. Sixteenth-century log house—the traditional construction of Middle and North Sweden.



To right. Solje Mansion. A wooden house from the early part of the nineteenth century.

In a country abounding in forests like Sweden it is natural that wood has been the chief building material from times immemorial and it was not until modern towns were built that it was largely replaced by brick and stone. The oldest wooden building in Sweden, a church from the 12th century, is still used for its original purpose, and there are many 16th century houses in use to-day. It is interesting also to remember that for rural building wood is still widely used.

Wood has many good properties. For example, it is a good insulator, and, in proportion to its weight, has very great strength. On the other hand it has certain weaknesses which are due to the fact that it is a natural product with a non-homogeneous structure. However, these can be counteracted by a careful selection and treatment of the material and by appropriate design of timber members.

The adoption of new production methods, e.g., in the treatment of wood, has made it possible to produce a building material more homogeneous and of higher quality than before. New methods of gluing and the use of resin impregnation have, for example, opened up new possibilities.

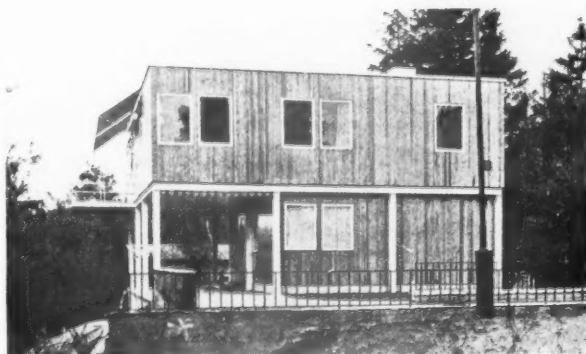
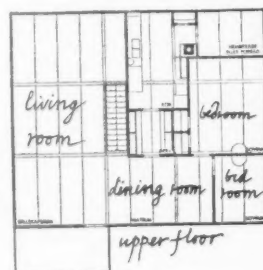
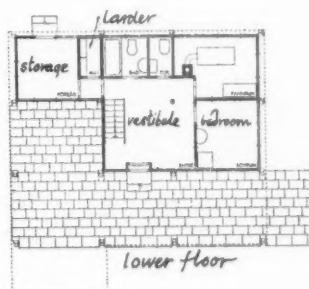
The production of many kinds of synthetic building materials made of wood, such as fibre board, is rapidly developing and already a wood fibre has been produced which has a greater tensile strength than ordinary structural steel. Thus wood is not only a building material with a long tradition, but it is also one which promises a great development in future.

Wooden houses have been and are being built in all parts of our lengthy country; in the comparatively mild, rainy Southern districts, on the North Sea coast with its damp climate and in the mountainous and Arctic regions of Northern Sweden. Methods of construction change according to the demands of the different localities and climates with a richness of variation which perhaps only wood can provide. Swedish experience of wooden houses is great and comprehensive. It has been proved that a properly constructed wooden house has a life which from a practical point of view is fully comparable with that of a house built of brick or stone, has a great resistance to both rain and moisture and high insulating properties.

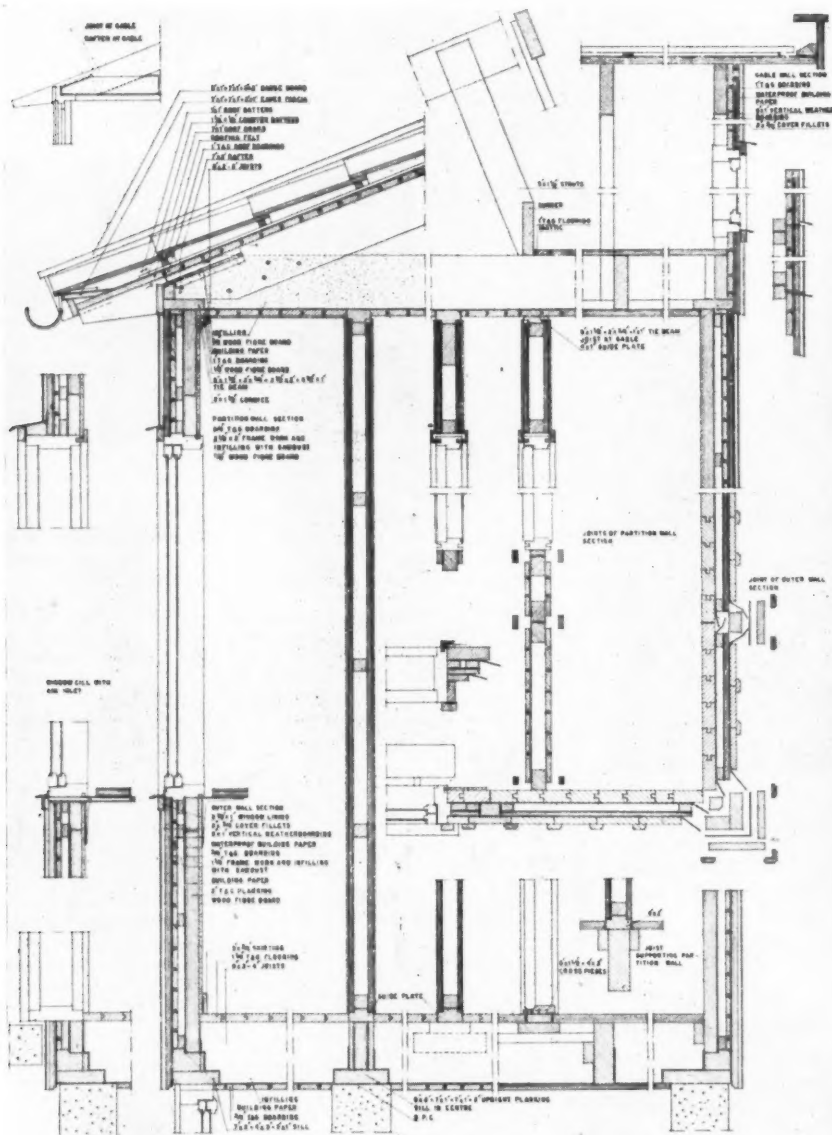
The 5 in. external wall in a typical Swedish house is about 5 in. thick and has the same heat insulating qualities as an ordinary brick wall 20 in. thick. A wooden wall is consequently

more economical in regard to both material and transport, and thanks to the relative lightness of the structure, the foundation can often be of a very simple kind. Also a wooden house is quick to build, and since there is no plastering it can be occupied as soon as it is finished. Last but not least the wooden house has proved to be well suited for pre-fabrication.

The chief disadvantage of wooden houses is the greater fire risk. For a brick house with four rooms and a kitchen the annual fire insurance premium is about 10 shillings, whilst for a corresponding wooden house it is about 25 shillings. If however, a wooden house is plastered externally, this latter figure is reduced to 18 crowns a year. The only limitation of wooden houses according to Swedish building laws concerns the fire risk and



To right. "Element" house by Erik Friberger. A radical solution of standardisation—plan above.



DETAILS SECTIONS OF PREFABRICATED TIMBER HOUSES SYSTEM 'SEKO I'

H. B. ARCHITECT
OSLO, NORWAY

stipulates that dwelling houses of wood may not be built with a greater height than two floors and an attic. Apart from this there are certain rules regarding wooden structures near chimneys and stipulations that a garage built in a wooden house must be lined internally with fire resisting material.

At present 90 per cent. of all Swedish one-family rural and suburban house building is of wood. The building of small houses rather than flats is considered desirable in many ways and is being supported both by the State and by the local authorities. In rural districts the State advances loans on advantageous terms and in certain cases even subsidies are granted. The State also maintains offices which give advice on architectural and other questions. Many municipal authorities give similar help.

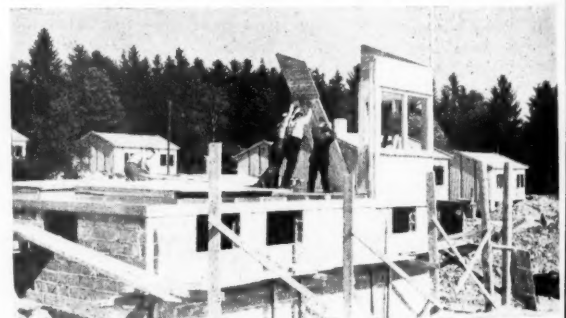
Stockholm is a pioneer in this development and during the last

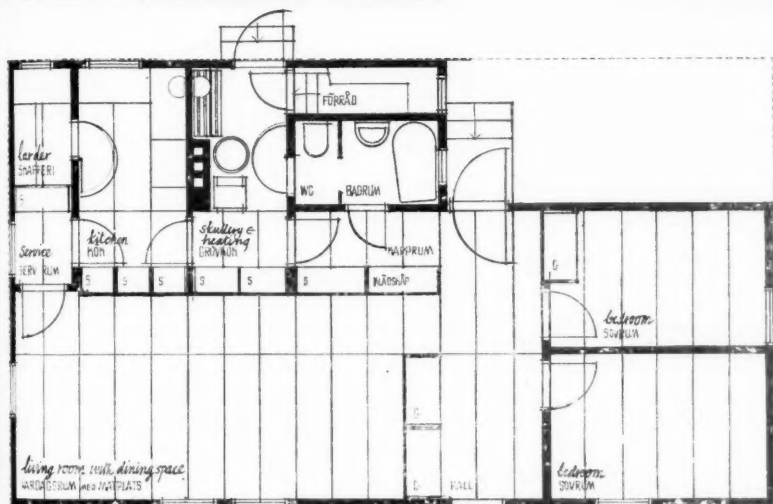
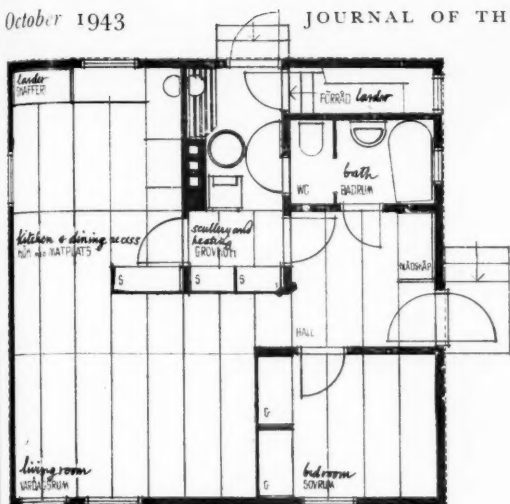
15 years has itself organised the building of 4,000 pre-fabricated wooden small cottages and terrace houses. In carrying out this work the City's "Small House Bureau" has actively helped to develop and improve the methods of pre-fabrication and assembly. Thanks to this building system and the financial aid rendered, it is possible for the future house owner to put up his own home with the help of the City's instructors. For a house of 3-4 rooms and a kitchen his initial capital outlay can normally be reckoned at about £90, the rest of the cost of the house being covered by loans from the town at low rates of interests. If the owner, however, carries out the work of erection himself, his cash payment is further reduced to about £18.

The use of pre-fabricated wooden houses has greatly increased in the last 10-15 years. At present about 40 per cent. of all domestic one-family houses in Sweden are built of pre-fabricated material and there is every indication that in future this percentage will be very greatly increased.

Architects have often regarded the development of pre-fabrication with anxious eyes, fearing that house building will become monotonous, stereotyped and insensitive to local traditions and surroundings. It has been found, however, that it would be wrong to try to oppose this quite natural development and that instead the professional man ought to use his energy and knowledge to improve the factory-made house from a technical and architectural point of view. A house-fabricating industry, led by truly first-class experts, should have

The photograph below shows the wall panels being raised. Where the panels meet a covering is provided by several layers of overlapping building paper. Unfinished joints can be seen on the houses in the background.





THE "SYSTEM" HOUSE BY SVEN MARKELIUS

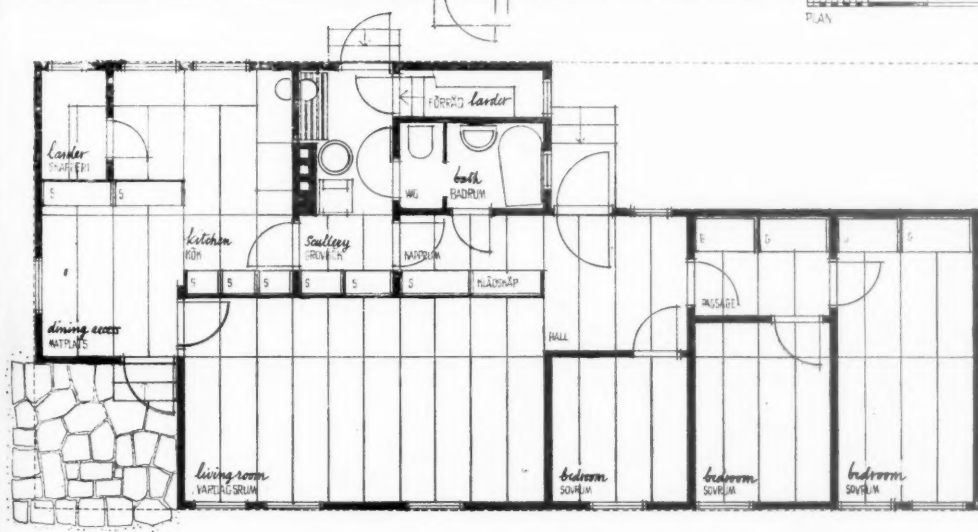
Plans showing the new line of development in standard house design with a tendency towards greater flexibility.

Cooking is done in a "recess" which also forms the dining space. The kitchen, bathroom and lavatory form a unit which is constant for all plans and in which the plumbing and the heating is completely standardised.

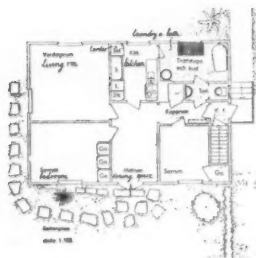
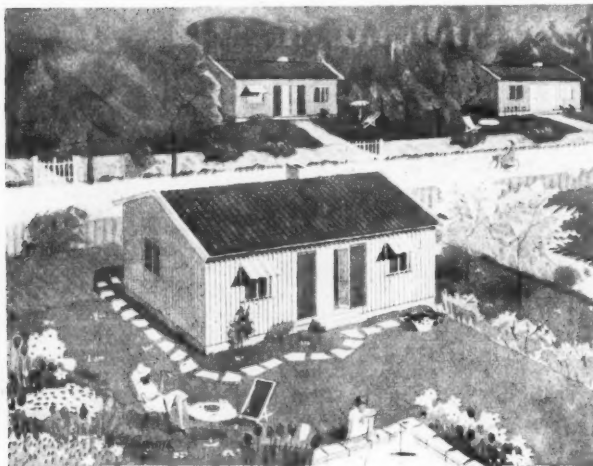
The plan is based on a standard floor and wall panel.

Heating is by means of warm air from a special stove which stands in the scullery: the warm air circulates through ducts incorporated in the joints between the floor panels.

At top. A room in a pre-fabricated house.



PLAN



Two-bedroomed house. The hall is expanded to form a dining space with direct service from the kitchen. Since the Swedish housewife does most of the clothes washing herself the bath-room is combined with a laundry.

great possibilities to improve the country's architectural standard.

The greatest scope for the wooden house industry lies in the making of small houses with four rooms and a kitchen, or still smaller units. In other words, within a field where the houses are so small that they do not present any economic possibilities for an architect to practice on individual lines. A collective organisation such as the wooden house industry can, on the other hand, afford to employ first-class architects. Since this industry caters for a very large public, a great number of houses which would otherwise be built by people with little or no technical and architectural qualifications receive expert consideration.

Certain cottage estates where large numbers of exactly similar houses have been built have proved to be repulsive and monotonous. Several attempts at counteracting this have been made, partly by using a more flexible planning, partly by choosing sites with interesting and varied landscapes and vegetation, but above all by varying the individual house to some extent according to the owners' wishes and requirements. The main problem at present is to find a method by which one can achieve this variation whilst keeping within the limits of a strict standardisation of structural units.

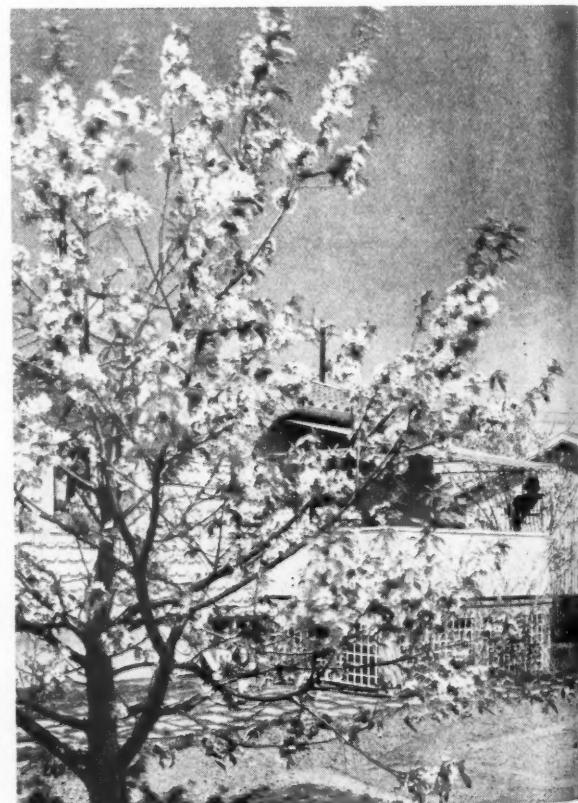
This is the crux of the whole problem—standardisation of the dwelling house must not prevent variation and individuality, but should instead promote it and make it possible from a practical and economic point of view. It is not the house that is to be standardised but the unit of which it is built. It is this principle on which the Swedish wooden house industry is now working.

For domestic houses two main structural systems have been used. According to one system timber is delivered at the building site cut into lengths and numbered. Under the other the house is delivered in the form of pre-fabricated panels which are jointed together on the building site. Through this latter system a dwelling can be assembled and provided with roof in a day which naturally is very advantageous especially as the wooden parts are practically protected against wet weather during erection.

The different house-making firms all use rather similar construction systems. The houses are normally erected over a cellar which is built of hollow concrete blocks.

The external wall-panels consist either of 2 in. to 3 in. thick T.G. battens with impregnated paper and boarding on the outside, and building-paper, an air space, boarding and fibre boards on the inside; or of a frame construction with impregnated paper and boarding on both sides and filled with some insulating material. The floor construction is either delivered in pre-fabricated wooden panels or in the form of cut and numbered timber pieces which are put together on the site. All joinery such as doors, windows, kitchen equipment, cupboards, wardrobes and shelves arrive complete and painted and also doors and windows, the latter always provided with double panes.

Central heating has mainly been installed so far, but it is possible that this system will be exchanged for a warm-air circulation system which will very much simplify plumbing.

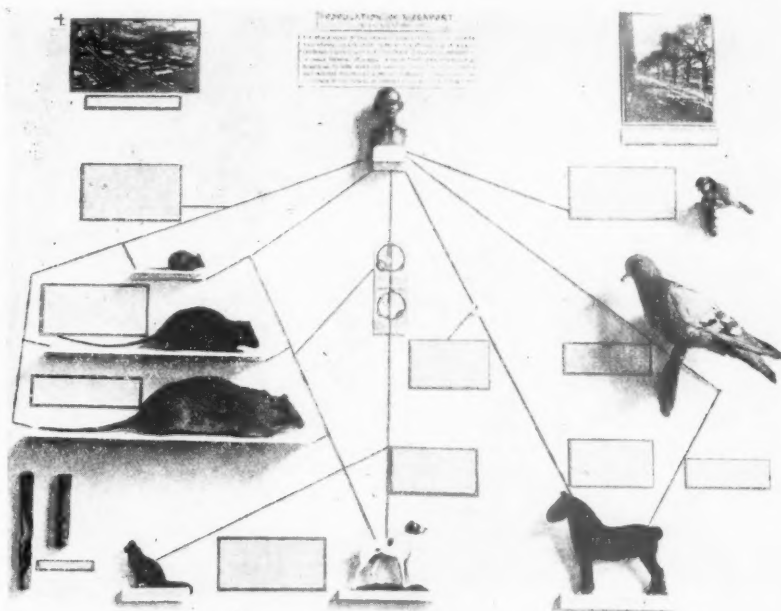


"Rebuilding" Our Urban Fauna

By COLIN MATHESON, M.A., B.Sc.,
F.R.E.S.

The control of rat and bug pests has long been of concern to architects. This article by the Keeper of the Department of Zoology in the National Museum of Wales broadens the discussion, as a matter largely of town planning, to include the whole population of urban fauna which we can deliberately or wantonly introduce and maintain, and which, whether for our positive delight or to lessen and destroy an evil, must be controlled.

Man, builder of cities, is the centre of a network of interactions between urban animals. As he created the habitat for these in the past he can control it for better in the future. An exhibit in the National Museum of Wales.



Town-planning on better lines after the war, and the problems presented by the older dilapidated areas of our great cities, are familiar topics. One aspect of these questions has recently occupied the attention of the writer when preparing an exhibit in the National Museum of Wales entitled "The Population of a Seaport." This exhibit is based on the fact that every great town is the home not only of human beings but of a numerous animal population, which affects men in different ways and is itself affected by various urban developments. This fauna is much the same in one town as in another, being composed of species dependent directly or indirectly on man, but that found in our ports presents certain special points of interest. Some of the animals concerned are a source of benefit and pleasure to man, many are injurious; and an effort has been made to show how modern methods of urban lay-out and house-construction may conduce, among other results, to the elimination of undesirable species and to a fauna which will add to the amenities of the cities of the future.

CITY BIRDS

Aesthetically the most pleasing feature of the urban animal community is, of course, the bird life. At one time kites and ravens were familiar on the housetops of London and other towns; and were welcomed as scavengers in the days when there were no municipal cleansing departments, as Clusius, Capello and other medieval writers tell us. But to-day the significance of birds in towns (apart from their significance for good or ill in allotments and gardens, which is much the same as in rural districts) is in the main aesthetic and educational rather than economic. The reports issued yearly on the bird sanctuaries in Royal Parks in London and Edinburgh are evidence at once of the variety of bird life in our large towns, and of the pleasure it provides for many of the human population. The pigeons around St. Paul's are in normal times one of the recognised "sights" of London; and when recently in San Francisco's Old Union Square, engineers "dug a four-storey parking garage which in emergency can serve as a bomb shelter," the people in the neighbourhood, during its construction, "left grain and water near by so pigeons would not go away."¹

It is obvious that the emphasis laid on additional parks and open spaces in the new town-planning schemes should result in this aspect of animal life becoming more conspicuous in the towns of the future. In the satellite garden city of Wythenshawe, with 1,000 acres reserved for a permanent agricultural belt and another 1,000 for open spaces out of a total of 5,500 acres, and with its wide parkways bordered by trees and flowers, bird life will find many more favourable haunts than in the parent city of Manchester.

Not every bird of course requires or should have any aid in maintaining its status. Our common house sparrow, introduced to towns in the United States against the advice of British ornithologists, has become not only a pest, but a menace to more interesting local birds, as in many European cities. In central Liverpool for example the bird life is stated to consist almost entirely of house sparrows, starlings and domestic pigeons. Where such species assemble in numbers they may, besides greatly reducing the chances for less "pushing" species, constitute a nuisance to local residents. The sparrow usually nests on or near houses and its untidy nests may often be a source of inconvenience in the down-pipes and friezes of buildings. Suitable attention to the plant life in the immediate vicinity of street buildings may prevent or reduce nuisances from this source; complaints of serious fouling of the footway and buildings by flocks of starlings and sparrows in a London borough a year or two ago were dealt with by closely pruning tall plane trees, which the birds were using, in the forecourts of premises in a main thoroughfare.

In the city parks the more interesting and less common species are often represented to a remarkable degree, even in built-up areas. Such rarities, for central London, as the snow bunting and the black tern have been seen in recent years in Hyde Park, in addition to brambling, kingfisher, nightingale, redstart, spotted flycatcher, marsh tit, great and lesser spotted woodpecker, great crested grebe, shag, and others; in St. James's Park, cormorants and coots have nested for years. In outer London, the remarkable total of 108 species was recorded for Richmond Park in 1938, of which 56 species were believed to have bred; breeding of various species is encouraged in the parks

¹ *National Geographic Magazine*, March 1943, p. 290.

by providing suitable nesting-boxes. These facts suggest how the parks, on the one hand, serve as resting and feeding places to attract birds in flight over a town, and, on the other, provide a breeding ground for many whose stay is more than a passing one.

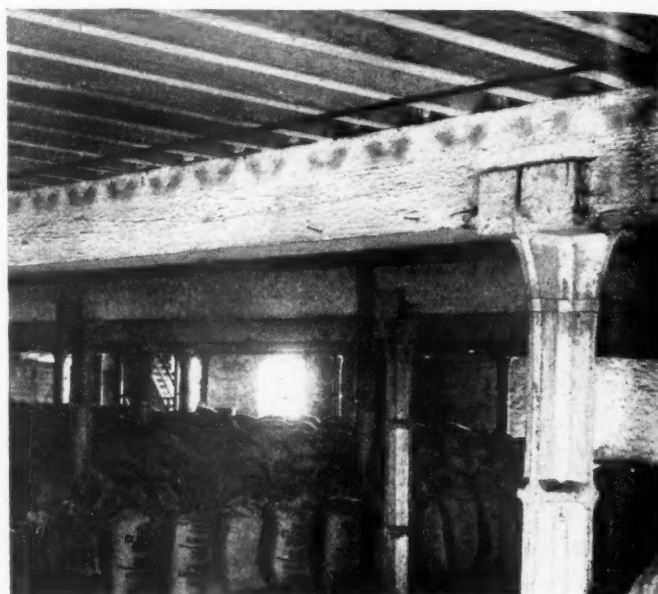
CATS & DOGS

Next to the birds, the members of the urban fauna with the greatest appeal for many people are the domestic pets. Statistics kindly supplied by the municipal authorities concerned show that in the years 1938 and 1939 (which may be taken as typical of peace-time conditions) there was, estimating from the dog licences taken out, 1 dog to every 21 people in Bristol, Cardiff, Leeds, Manchester, and Newport; 1 to 27 people in Liverpool, and 1 to 16 in Birmingham and Southampton—the average over all being 1 dog to 20 people. The proportion of cats is probably still higher, but no basis for an estimate exists except the numbers of stray cats received for humane disposal at cats' shelters, etc. In Glasgow, for example, approximately 22,700 were destroyed by such organisations in 1936. In Liverpool, the average number destroyed during the eleven years 1930-40 was 33,300 annually; on the conservative basis of three left alive for every one destroyed this would give about 100,000 cats, which, since the area covered includes Bootle and Crosby, means roughly 1 cat to every 10 people, or say 1 to every 3 families.²

The desire for a domestic pet is obviously strongly developed in a large proportion of British citizens, but it may not always be possible to gratify it in the new housing schemes anymore than in the old. Occupants of many old sub-let tenement properties in Glasgow are forbidden to keep cats; a prohibition paralleled by the rule in modern London County Council flats against the keeping of dogs.³ In buildings of this type, it must be admitted, animals may well be a nuisance at times, and these rules seem inevitable. "Complaints with reference to nuisance caused by cats and dogs are not uncommon," says the Annual Report for 1931 of the Glasgow Medical Officer of Health. In districts, however, where it is practicable to adopt the separate-house-with-garden principle, as opposed to blocks of flats or in place of tenements, the desires of the pet-lovers may be reconciled in a greater degree with the legitimate requirements of their neighbours. Conditions in such districts under the new planning schemes should also be more favourable, in certain respects, to the health of domestic pets and thus to the human residents; since tuberculosis is stated to be not uncommon among dogs and cats in congested industrial towns to-day, and may readily be conveyed from them to man.

RATS AND MICE

Among urban animals whose presence is wholly detrimental to man may be mentioned first the swarming population of rats and mice. It is on record that 600,000 rats were destroyed in Paris in a fortnight and 103,000 in Copenhagen in eighteen weeks; and while those figures give no indication of the actual or relative abundance of rats in the towns concerned, they do provide some suggestion of the rodent population that finds food and shelter in every great city. The structural measures to be employed in houses and other buildings against the burrowing brown rat, such as the liberal use of cement in cellars and foundations and the proper protection of their doors, ventilators, etc., are sufficiently well known,⁴ but it is instructive to notice the detailed analysis made at Manchester of the causes of infestation. There during the three years 1934-6 inclusive, 5,791 premises were found



Evidence of the need for attention to upper parts of buildings in keeping out black rats—markings on a dock warehouse beam caused by the passage of black rats along its length.

to be rat-infested, and in 67 per cent. of these the infestation was found to be due to, or associated with, defective or disused drains or sewers. From 1931 to 1935, measures for the repression of rats and mice were carried out at 11,191 premises; and of the few cases (298) where re-infestation was reported, practically all were traced to the subsequent development or discovery of defects in sewers or in external or internal drains. At Glasgow, "rats were found to be gaining access . . . through apertures in the walls under the ground where service pipes such as gas, water, drains, etc., entered the buildings. There is no doubt that the increasing number of pipes and electric cables laid under footpaths provide easy tracks for rats . . . to infest buildings where there are openings under the ground in the walls. More care should be taken to seal all openings in walls. . . ."

The problems presented by the black or "ship" rat of our ports are of special concern to the planners of buildings and cities to-day, since some modern developments tend to aid the spread of the species. Thus it is considered that the efforts of this animal, an adept climber, to extend its range inland from docks and recolonize our great cities have been greatly aided by rebuilding and the rat-proofing of basements (which has shut out the competing brown rat) and by the extension of the telephone system and the removal of a number of kitchens from basements to roofs. The danger is no theoretical one, since it is known in the City of

² For these statistics I am indebted to Mr. F. J. Winchester, Secretary of the R.S.P.C.A., Liverpool Branch.

³ " . . . such rules in L.C.C. flats as those forbidding the keeping of a dog . . . are borne with an ill grace." (G. and E. G. McAllister, in *Town and Country Planning*, 1941, p. 127).

⁴ Reference should be made to the official British and American pamphlets:—U.S. Dept. of Agriculture, Farmers' Bulletin No. 1698, *Ratproofing Buildings and Premises*. Ministry of Agriculture and Fisheries, Bulletin No. 30, *Rats and Their Extermination*, 6th Ed., 1942, 6d. Also Hovell, *Rats and How to Destroy Them*, 1924, pp. 204-223.

London to-day the black rat has become much commoner than the brown; and (a striking example of the association of the species with modern buildings) of the rats taken in San Francisco by trappers in 1936-7, about one quarter were the black species, found almost exclusively in the section that was rebuilt after the great fire of 1906. "In 1939 a survey of the status of the black rat in British seaports generally was undertaken by the writer,⁵ and Sir Arthur McNalty, then Chief Medical Officer to the Ministry of Health, commented in his annual report on the health of the nation that this survey indicated the necessity for measures against the species not only at docks but at a distance therefrom.

In all seaports particular attention should be paid to excluding them, by sealing off floors, ceilings, etc., from upper floors and roofs. Efficient rat-guards should be fitted where there is any connection (e.g., telephone cables) between one roof and another. The word "efficient" is used advisedly; the observations and experiments of Surgeon Denny, of the U.S. Public Health Service, on rat-guards of various types used in docks have shown how inefficient some of them are; while even in trials with the black rat and a standard circular metal guard as used in the Panama Canal zone, "The ease with which he crossed over a standard, rigid, 3-foot rat-guard . . . to say the least . . . stimulated thought regarding the resourcefulness of this animal and the design and efficiency of rat-guards." The photographs in Surgeon Denny's paper⁶ are well worth studying by those concerned with structural features designed to prevent the spread of the black rat throughout towns.

BED BUGS

Of urban insect pests one of the worst is the bed-bug, which in 1937 was estimated to be a source of more or less acute discomfort to over 4,000,000 inhabitants of Greater London. The problem is of course at its worst in congested areas of large towns—many factors besides the actual size of the town are naturally involved in the degree of infestation, but in general it has been found that the percentage of houses known to be infested may be five to ten times higher in big industrial towns than in those of forty or fifty thousand people.⁷ The pest is moreover not confined to old slum areas in these towns, but is found in new housing estates and in better-class property as well. The part which improved building design can play in reducing this pest is so important that the Report of the Committee on Bed-bug Infestation, issued last year under the auspices of the Medical Research Council, included a special section on "Building Design in Relation to Bed-bug Infestation." The recommendations deal with the reducing of harbourage to a minimum by appropriate attention to foundations, floors and skirtings, walls and ceilings, roofs, doors, picture rails, etc., and also with facilitating disinfection by the planning of buildings in simple, rectilinear, accessible compartments and in such a way that joinery fittings, slab wall and ceiling linings should, so far as in any way possible, be easily removable. Special consideration for example is recommended to the concrete foundation of dwellings on difficult sites, so as to avoid cracks due to settlement. The risks of cracking where the different materials join can be reduced by careful workmanship and selection of the materials to be used. In roofs, it is not safe to assume that the mortar joints of the party walls are sufficient to prevent passage of the insects from one house to another. The walls of chimney flues are usually rendered with plaster as an extra precaution against fire, and it is suggested that this rendering should be extended, at least on one side of the wall, to the small amount of rough walling of the party walls usually left unplastered. The stopping as soon as possible of cracks in plastered walls and ceilings, and of the crevices that develop between floor and

skirting, are among the other measures recommended. By these and other methods, it may be hoped, the future town-dweller will be saved from the experience of housewives living, as recorded by Margery Spring Rice, in houses where "The bugs . . . in the rotting woodwork cause endless extra work in an endeavour to be clean. It has been necessary to sit up at night to keep the bugs off the small baby."

The eradication of other familiar pests, the common and the "German" cockroach, is also likely to be in part achieved by similar attention to structural details in new houses; since it is generally in old buildings with many cracks and crevices in walls and floors, between floor and skirting-board, etc., that these insects abound. As illustrating the numbers found in badly infested premises in present-day cities it may be mentioned that a few years ago, in one public building, 8,430 were caught in less than three months. In one Lancashire town containing 16,809 occupied houses, 120 (or over 7 in every 1,000) were found in 1938 to be infested with cockroaches. Their relative the house-cricket has also been reported as a pest even in two new housing schemes in a northern city, as well as elsewhere, and in the cases concerned, after the floors were lifted, it was found advisable to cement up the interstices of the brickwork forming the hearths.

The question of bug-infestation is very important where it is decided to build timber houses. At Glasgow, the type selected had walls of solid western red cedar covered with insulated felt, strapped metal lath and finished externally with Dorset P. rough-cast; the walls being lined internally with Gyproc wall boarding with bevelled joints filled with plaster. It was considered that this type obviated as far as possible the danger of widespread infestation.

FLIES

Other undesirable insects characteristic of cities include the house-fly, which may be considered as particularly an urban type since the great majority of flies found in cities are of this species. In the United States it was found that of more than 23,000 flies caught in rooms, where food was exposed, in different cities, almost 91 per cent. were house-flies; while in this country, out of 24,600 flies caught in Birmingham, 91 per cent. also were house-flies. In the elimination of this pest the architect has his part, for while the typical breeding-place of house-flies in our climate is fermenting horse-manure (a breeding-place much scarcer in cities than formerly because of the replacement of horses by motor traffic), the insects breed freely in decaying organic matter such as is often present in ashpits and larger deposits of house refuse; and it is by no means every household bin which is, in Major Austen's words, "really, and not merely nominally, fly-proof." A factor likely to be of increasing importance in refuse collecting is the installation in large business premises, blocks of flats, hotels, etc., of big "containers" instead of a number of small bins; in the Borough of St. Marylebone this system was started in 1925, when containers were purchased by several large business houses. By 1938 the system had been adopted in most of the newer large blocks of flats, restaurants, etc., and 220 were in use. The system proved to be more hygienic, quicker and more satisfactory generally than the use of numbers of ordinary bins; the containers being removed daily in specially designed vehicles, emptied, cleaned and disinfected before return. The co-operation of the R.I.B.A. was invited with a view to attention being given to refuse-storage and collection in the planning of new buildings, and to the incorporation of the refuse-container system therein; and the considerable progress achieved in this direction is, it may be hoped, suggestive of what may be done on a greater scale after the war to facilitate refuse disposal in large buildings and thus reduce the dangers from house-flies, which include typhoid, summer or infantile diarrhoea, cholera and dysentery, as well as certain maladies caused by parasitic worms.

From this brief account it will be seen how those planners whose task it will be, in the poet O'Shaughnessy's phrase, to "build up the world's great cities," may envisage, as not the least important result of their planning, the replacement of the urban pests that thrive in darkness and squalor by a fauna, wild and domestic that will all be a source of pleasure to citizens of the future.

⁵ "A survey of the Status of *Rattus rattus* and its Subspecies in the Seaports of Great Britain and Ireland" (*Journal of Animal Ecology*, Vol. 8, 1939, pp. 76-93).

⁶ "Some Experiments with Rats and Rat-guards" (*U.S. Public Health Reports*, Vol. 53, No. 23, 1937, pp. 723-6).

⁷ Matheson, "The Distribution of *Cimex lectularius* in Towns in England and Wales" (*Bulletin of Entomological Research*, Vol. 32, 1941, pp. 165-171).

HOUSE CONSTRUCTION OF A DEFINITE LIMITED LIFE

MEMORANDUM PREPARED BY THE ROYAL INSTITUTE OF BRITISH ARCHITECTS AT THE REQUEST OF A SUB-COMMITTEE OF THE CENTRAL HOUSING ADVISORY COMMITTEE OF THE MINISTRY OF HEALTH AND PUBLISHED WITH THE MINISTRY'S CONSENT

In this memorandum it is assumed that "*House Construction of a Definite Limited Life*" refers to housing to be erected under a relaxed code of building bye-laws wherein a poorer quality of construction and material would be acceptable than would be the case in housing erected under codes for a full span of life.

For the sake of brevity the type of housing under consideration is referred to throughout as short-life housing in order to distinguish it from ordinary or long-life housing.

The reasons for considering a policy of short-life housing are as follows:—

- (a) Post-war shortage of housing and shortage of time.
- (b) Post-war shortage of materials of traditional kinds.
- (c) Post-war shortage of skilled labour.
- (d) Post-war cost and quality of building.
- (e) The greater use of standardisation and pre-fabrication.

(a1) Government is faced with difficulties, especially in respect of the shortage of housing and of time. It would be regrettable, however, if the difficulties led to relaxation of bye-laws or the acceptance of construction and substitute materials of any kind that could be interpreted as an acceptance by the Government of an official form of jerry-building. No shortage of housing or of time should be accepted as a reason for anything of the kind, or of damage to the amenity of town or country.

It has been stated that a house could be produced by the same methods as a motor car. The useful life of a car at its longest, however carefully it is looked after, is probably not as much as twenty years. A hire-purchase car is worn out by the time it is paid for and the owner is faced with a new capital expense for replacement; a short-life house will be worn out by the time its mortgage is cleared and the owner is faced with a new capital expense for replacement; a long-life house after its mortgage has been cleared has a considerable period of usefulness left in it for the enjoyment of its owner to recompense him for his initial outlay.

In short-life building so much must be provided of a permanent character that it would be advisable to erect the whole building permanently.

(b1) The shortage of materials, whether artificial or real, of the kinds used and proved in value for traditional building, is not a reason for any action that may result, in the long run, in their suppression or supersession by materials that have no tradition or proved value behind them. Every new material should be subjected to rigid and exhaustive test and proof.

A case could be made out for devoting some of the energy directed to the production of substitute materials towards the increase in manufacture of traditional materials that have been proved in value through centuries of good craftsmanship. It is the opinion of the Royal Institute that no temporary shortage of traditional materials should be accepted as a permanent condition or encouraged into a state of permanency. Temporary shortages should be tolerated for a brief time only after the war.

(c1) The shortage of skilled labour after the war should be looked upon as a temporary condition in the same way as a shortage of traditional materials. A great effort should be directed towards preserving the skilled crafts and the skilled labour that creates them, especially in view of the danger of suppression and supersession of both craft and skill by use of ready made and untried goods. Adventurers into the building and allied trades, with little regard for anything but quick profits should not be encouraged. The Royal Institute is of the

opinion that the Government should direct its policy towards the encouragement and improvement of the crafts in the industry and, towards that end, should foster the training of new entrants through proper apprenticeship and the building trades schools. Where a policy of this kind is pursued in conjunction with the Board of Education, a period of five or six years after the war should see a large number of skilled young men taking their place in the industry.

The Royal Institute would regard with regret the creation of a body of labour unskilled in any craft but the assembly of ready-made houses by means of the spanner.

(d1) The Royal Institute considers that, however short the life of the intended housing may be, a long term view of its cost should be taken.

It is to be supposed that short-life housing can only be permitted under some relaxation of the existing building bye-laws, which would, in its turn, indicate some surrender of quality in materials and workmanship. Apart from the consequent loss of amenity cheapness in these initial factors will lead to high cost of maintenance which is likely to prove more expensive than the initial saving. It cannot be satisfactory that a saving in capital outlay should be made at the cost of higher maintenance charges spread over even a short-life.

There is a danger that a short-life house once permitted and erected may come to be regarded as a permanent building. Licences and permits have a habit of being extended, and there may be an especial danger in this case where the paying off of capital outlay must be compressed into a short period.

The financing of the short-life house, owing to this compression, may have the effect of raising the rent of the house, which in turn would lead to higher assessments for rates and taxes. It would seem that the payment of compressed mortgage charges, higher rent, rates and taxes, and higher maintenance costs are all against the introduction of short-life housing.

The cost of foundations and services are likely to be approximately the same in either the short or longer life building. Services can hardly be reduced in quality or consequently in their useful life and are likely to outlast the carcass of a short-life house, becoming an unnecessary waste when the superstructure is ultimately demolished.

(e1) Prefabrication, standardisation, and mass production have been applied successfully in the past to building units such as windows and doors, grates and mantels, cookers and ranges, lavatory apparatus, door furniture and ironmongery, and to electrical goods and fittings of many kinds; there is a useful and legitimate place for such standardisation and prefabrication. There is, however, a danger of advertising slogans being made use of for the purpose of selling questionable goods, or even whole houses, to an inexperienced public. The Royal Institute suggests that the Government should not take any action that might lead to the exploitation of the public. The danger to the industry and crafts has already been stressed but the public well-being is to be considered, its freedom of choice, liberty of market, and the exercise of its taste and preferences should be preserved. Situations might arise, however unwittingly, where a continuation and misuse of the war time system of licence and permit might be used to force the public to accept certain manufacturer's goods when it might have other legitimate preferences.

It is probable that war factories will be converted to the

production of goods useful to the community on the termination of hostilities. It would be inadvisable that too great a proportion of this production should be directed into the building industry; the proportion should diminish as the shortage of traditional materials decreases.

The production methods of these factories can, no doubt, be used for standardisation and prefabrication; neither of these are new in the industry but unless quality is inherent in the goods produced the results are likely to be too poor for use even in a short-life house. War-time production has been subject to governmental supervision, inspection, and test at all stages of manufacture. If quality is to be maintained in peacetime production supervision, inspection and test will need to be retained, and should be regarded as part of the essential cost of mass production. Unless quality is an obtainable object, as well as cheapness, much of the argument in favour of mass production becomes specious.

CONCLUSIONS

As a result of the foregoing considerations, the Royal Institute has come to the following conclusions:

(a2) While recognising the difficulties arising from shortage of housing and the urgency of the problem, the Royal Institute is unable to recommend short-life housing as an adequate solution of the housing problem.

(b2) While recognising that there may be shortages of materials of traditional kinds after the war, the

Royal Institute is opposed to substitution for them of unproved materials.

(c2) The Royal Institute is opposed to the creation of a body of men unskilled in any craft beyond the assembly of ready-made buildings. It is in favour of the creation of an increased force of skilled labour through apprenticeship and training, and is of the opinion that such a force could be obtained in a limited number of years.

(d2) The Royal Institute is of the opinion that only a long view of housing could be acceptable. That codes of building bye-laws should not be relaxed for the sake of speed or cheapness at the expense of quality in either building materials or construction.

(e2) The Royal Institute recognises that there is a place for a limited application of standardisation and prefabrication and the advisability of converting war factories to peace-time uses. It is not in favour of diverting these factories indiscriminately to the production of either ready-made buildings or building materials, especially to goods or construction of untried quality or value. It is in favour, to a limited extent, of discriminate mass production provided good design and quality are integral parts of the goods produced. The Royal Institute is not in favour of these factories being assisted to force their goods on the public, or in any way to limit the freedom of choice and the exercise of judgment by the public.

TWO IMPORTANT BOOKS ON PLANNING

Reviewed by GORDON STEPHENSON [A.]

City planning is a simple matter, easily understood by anyone who knows that water runs down hill; that streets should be graded; that sunlight and air are good for people and that order is better than chaos. It is the entire social, economic and political scheme of things that is complicated. CLEVELAND RODGERS.

We will find . . . that in olden times there was an intimate, although perhaps subconscious understanding between the people of the town and those who built the town; whereas the present-day urban population, generally speaking, is

rather indifferent to town building problems and must, therefore, be enlightened. This enlightening, we will maintain, is the problem of the architectural profession, for the architects have in their hands the means and methods to show how towns and cities must be built. It is up to architectural education, we conclude, to educate architects toward such an end, and, therefore, first of all to investigate whether or not the prevailing educational methods are appropriate in this respect.

ELIEL SAARINEN.

Two important books on city planning have recently been published in the U.S.A.* The one is by an architect of international renown and the other by a member of that powerful agency of local government, the New York City Planning Commission. Saarinen, the architect and scholar, uses a vast canvas embracing history and the sciences to develop his theme of organic decentralisation. Rodgers, the journalist and administrator, paints a smaller picture in which attention is sharply focussed on the human and physical complexities of New York City, heart of the largest metropolis in the world. Saarinen's book is illustrated by his own boldly drawn black and white sketches which add point to his world-wide survey, while Rodgers uses photos and diagrams showing New York development only.

Since Unwin wrote his *Town Planning in Practice* for a preceding generation there has been no finer statement for civic design than that embodied in *The City*. Between the wars Le Corbusier carried away the younger architects by sheer artistry. He flew high in the stratosphere and often lost sight of the ordinary folk. But in the stratosphere he used a Flying Fortress technique with telling effect. His heavy calibre guns accounted for many of the enemies of architectural progress. When he did come down to earth at times he produced many morsels of ageless architecture and civic design which exemplified first principles. Saarinen has never indulged in the excitement of flying at giddy heights.

**The City: Its Growth; Its Decay; Its Future.* Eliel Saarinen. Reinhold Publishing Corporation, New York. 1943. 380 pp. illus. \$3.50.

New York Plans for the Future. Cleveland Rodgers. Harper & Brothers. New York and London. 1943. 293 pp. illus. \$3.00.

He has pursued a steady course with both feet on the ground. He is first and foremost a craftsman and master-builder. He has always been content to work with other craftsmen and preferably for the ordinary folk of his time. On many occasions he has come to grips with the very real political, social, and economic problems of city building to-day. He can speak with commanding authority on the subject matter of his book.

Eliel Saarinen was born and educated in Finland and his early work was in that country. He became internationally known as an architect and town planner, and prepared schemes for many communities in Finland including Helsinki. In 1922 his design was placed second in the competition for the Chicago Tribune Tower, and brought him into immediate prominence in America. With the publication of his design and the acclamation of the architectural profession the fantastic issue of whether skyscrapers should be "classic" or "gothic" came to an end. Skyscraper architecture of the late twenties, culminating in the Rockefeller Centre buildings, stems from Saarinen's project. Curiously enough Saarinen has not built a skyscraper and does not believe in them as a form of city building.

Since 1922 Saarinen has been director of Cranbrook Academy of Art, one of the most important American centres of education in architecture and allied arts. The group of buildings forming the school is situated in a magnificent stretch of parkland which lies about twenty miles from Detroit, Michigan. Originally the park surrounded the large country house of Mr. George Booth, a wealthy man who has turned his estate into a setting for a fine group of schools of which the Academy and the residential High School for Girls are the best known. Saarinen has designed the groups of buildings which are to be found in different parts of

the park. The sculpture of Milles and textiles of Mrs. Saarinen, both members of the Academy staff, enrich the architecture.

Every year about ten students who have graduated in architecture at some other school are awarded free places in the Academy. There they live and work under ideal conditions and almost inevitably do research into housing and civic design. In all parts of the States and in some other parts of the world Saarinen's students are to be found. More often than not they are architects or planners in federal, state, or local government employ. Saarinen is convinced that there is a scarcity of town designers and that high architectural skill can be exercised to-day only if architecture is considered a vital part of organic town development. He, unlike many other architects, does not berate the other professions, politicians, or economic *laissez-faire* as solely responsible for the chronic disorder of the twentieth century town. He believes his own profession must take a fair share of the blame and that even to-day far too few architects are being trained in civic design. He challenges our present method of architectural education.

The first half of Saarinen's book contains a devastating criticism of post-renaissance and contemporary architecture, which is constructive criticism nevertheless. He states principles that modern architects and planners have agreed upon. Like others, notably Mumford, he finds excellent principles of design in mediæval town-building, which are universal in their possible application. He is not an advocate of mediævalism but he clearly analyses the factors which gave the mediæval town a unity and coherence of form which are lacking in later urban development. His condemnation of post-renaissance town building is on two counts:—First, changed social conditions brought about a pattern of materialistic superficiality (Giedion emphasised this in his analysis of Haussman's Paris¹). Second, architectural form expression became a mere imitation of ancient and obsolete style forms.

Saarinen recognises a growing consciousness of the need for planning which developed through the nineteenth century into the twentieth and the efforts which have been made to alleviate the malady of urban disorder. But, he points out, most of the effort has been confined to temporary expedients attempting to correct earlier mistakes. As a consequence the need for urban rehabilitation and decentralisation is greater than ever to-day. He foresees no real improvement through two-dimensional planning, which considers only street layouts and zoning. He urges consideration of all the problems of the urban community—physical, cultural, social, and æsthetic. These call for research by a competent, permanent planning body and a gradual reorganisation of the city in accordance with a continuous flexible design process which Saarinen calls "civic design" or three-dimensional planning rather than city or town planning which have come to imply two-dimensional planning.

Basic to civic design, as Saarinen understands it, is "organic decentralisation." He sees civic design as a process which will bring organic order into urban communities and keep that order alive. He draws the analogy with nature using the example of the healthy cell tissue, a growing organism with each cell expanding into the space provided for its growth. He stresses the principle of the smaller community, or neighbourhood unit, within the larger community which has recently been so well demonstrated in the London Regional Reconstruction Committee Plan and the County of London Plan.

Saarinen does not shirk the issue of land values, but points out that there are two distinct types of land speculation, the one tending to assist healthy development, while the other tends to strangle it. He proposes the elimination of harmful speculation and suggests specific methods of transference of land ownership. He also suggests specific legislation whose primary purpose would be to implement town design. Without adequate planning legislation—and we slowly move towards the basic legislation of

land use control—social planning is not possible. "Urban population," says Saarinen, "is that community-family whose characteristics must be transposed into corresponding characteristics of the town's physical order of steel and glass and brick and stone. This kind of relation between town population and town formation was made evident in the mediæval case. In fact, such a relationship can be found in any circumstance, no matter whether this finding is encouraging or discouraging." He draws this analogy after stating that "to consider the attitude of the urban population in town building problems, is just as natural a thing as to consider the characteristics of a family when designing a house for that family." We have gone a long way in house design. We have a longer way to go to achieve comparable results in town design, for as is clearly shown in this book, it must be preceded by social planning.

Saarinen's major points are:—First, we must have social planning; second, buildings must fulfil real community needs, be sited as an integral part of a community plan and be designed as part of an organic group; and third, city rebuilding must proceed on the basis of organic decentralisation which, in effect, means the principle of cellular growth in neighbourhood units with traffic arteries passing between them.

Saarinen uses the example of New York midway through his thesis. As an artist he admits being carried away by Manhattan Island despite the fact that Manhattan and the other New York boroughs form an urban conglomeration which is the antithesis of what he would like to see in the future.

New York City is three times the size of the County of London, covering an area of 310 square miles and containing 7½ million people. Of these millions nearly two are on the 22 square miles of Manhattan Island, which is the hub of a metropolitan region in which live 12 million people. Cleveland Rodgers, the New Yorker, concentrates entirely on his city and makes little or no reference to anything outside its boundaries. His book is first-rate journalism, and, as such, is much more exciting reading than Saarinen's, but because of its tight confines it is less valuable. Its chief importance to readers in this country will be because of its first-rate exposition of New York's planning history.

Rodgers is by nature and training a liberal who believes that common sense will gradually prevail. His thoughts about the future are woolly compared with Saarinen's, despite the fact that his book contains telling financial statistics and shows real understanding of the massive human problems generated in a great city. Comparing the two books one is confirmed in the conclusion that the creative mind with real understanding and clear vision is vital in any planning organisation.

In 1936 a new City Charter was adopted by popular referendum in New York City. It streamlined the city government and amongst other things established a city planning commission with substantial powers in the governmental process. It was very different from the advisory agency which preceded it, although this agency, the Mayor's Committee on City Planning², had made many valuable basic surveys. If hundreds of white collar workers had not been available through federal government relief funds these basic studies would not have been possible. A decade previously the New York Regional Survey and Plan³ had been financed entirely by voluntary funds, the main contribution coming from the Russell Sage Foundation.

In his brilliantly drawn historical background Rodgers demonstrates the confusion of thought and overlapping of function which ensue in the governmental process when the government is constantly at the mercy of pressure groups and external economic factors. The streamlining of the New York Government brought about by the 1936 Charter goes some way to combating the serious situation created, but it is quite clear that the

¹ Siegfried Giedion. *Space, Time, and Architecture*. Harvard and O.U.P., 1941.

² Recorded in City Wide Studies; Pt. 1. Basic Factors in Planning the City of N—Y—; Pt. 2. The Planning of Public Services . . . ; Pt. 3. Programming Public Improvements. Mayor's Committee, etc.: N. York City, 1940.

³ *New York Regional Survey* (7 Vols.), published 1929. *New York Regional Plan* (2 Vols.), published 1931.

kind of planning advocated by Saarinen will only be possible in New York when international trade and finance are planned and when the city's function is clearly established and recognised in a national framework of development. As New York is now the most important centre of international finance—a control point—and it has ever been linked to the destinies of Great Britain, its future is of more than passing interest to us.

Largely because of its enormous importance as a financial centre in recent years the development of the City of New York has been influenced by an extraordinary series of financial experiments in real estate. In the hectic decade following the last war speculation reached fever pitch. The general attitude towards investment was duly reflected in real estate transactions. The sky was the limit in more senses than one. Everyone believed in the expanding universe. But this universe proved to be nothing but an ever growing balloon which, inflated to bursting point, collapsed miserably in the four years following 1929. The vacuum caused the great world depression. The era of skyscrapers came to an end in New York and Hitler came into power in Germany.

The United States Government since 1933 has curbed speculation to a very considerable extent, it has exerted a growing influence in the field of house-building for both the middle and the lower income groups. Through insuring loans on housing for the former and subsidising housing for the latter it is now assuming a direct financial responsibility. It has also taken a direct interest in the field of public works. New York since 1933 has been greatly aided in many of its large projects by federal financial assistance. It is going to score heavily after the war by having many large scale projects worked out in detail and ready to be translated into building at the word "go." At the present time the city government is spending more than £4,000,000 on drawings and specifications for post-war public works projects. The planning commission is responsible for the framework of the

programme. One of its main functions is to ensure that all public capital improvement programmes are properly co-ordinated. It prepares the annual capital budget after weighing the demands of the various government departments. It has prepared a master plan for future development which it keeps constantly under review. The zoning ordinance, which it is empowered to revise, is the legal document which enables it to exercise a fair measure of control over private development. Great advances have been made but serious difficulties and anomalies still exist. Planning in New York has a long way to go, despite the very powerful commission, before it can pattern the city on the principles Saarinen has set out. And this despite the fact that Cleveland Rodgers and his fellow commissioners no doubt agree with most of those principles.

Fundamental to such principles of development is further and far reaching reform in land-use control, local government taxation and finance, and the use of private capital. Even beyond this there is the enormous question of international stability. Rodgers sheds a good deal of light on all these points in relation to his own city. In an admirable chapter he also discloses the fact that in 1686 when New York was a small town on the tip of Manhattan the city government owned all the undeveloped land which was nearly the whole of the island. One can speculate on what might have happened if the city had retained ownership. Two centuries later Howard was advocating community ownership of land. Two and a half centuries later the Uthwatt Committee was practically of the same opinion.

New York City is now encircled by a vast array of 289 incorporated municipalities covering 14 counties in three states. Greater New York is a huge congested agglomeration with its complexities more exaggerated than any other metropolis, but its problems are fundamentally the same. Saarinen and Rodgers have helped us to see those problems more clearly. They have yet to be solved.

Principles of National Planning

Dr. Gutkind opens his contribution to Dr. Karl Mannheim's distinguished series of volumes with a quotation from Herbert Read's *To Hell with Culture*. "When Hitler has finished bombing our cities, let the demolition squads complete the good work. Then let us go out into the wide open spaces and build anew."

In just over 320 pages he shows the way from "venerated cheapness and shoddiness" to the sensible and elementary things that give "culture" the ring of conviction. The way—and it must be pursued with audacity—is *National Planning*. The goal is the emergence of a truly democratic community, which is the fitting environment for the new "social man" who is to replace the old "economic man." The National Plan is to be the basis of the creative demobilisation of the Forces and the workers from the war factories; no effort is to be wasted on work outside it and there is to be no period of halting indecision after the armistice during which production is to be gradually adjusted to peacetime needs.

The National Plan asks for nothing less than the "unconditional surrender" of all individual vested interest to the nation and to "the planners as the trustees of the nation." Dr. Gutkind supplies the arguments and the facts for his demand.

After reading the first volume, there emerges a fairly concise picture of the present consensus of opinion amongst planners in this country and in the United States. National Planning would be first and foremost Social Planning. The attempt would be made to find a mode of arranging work and life in an industrial

age in such a way that the social balance of pre-industrial periods of development is re-established. It is understood that such a plan will be expensive in money cost; that, in fact, we shall have to give up leisure time or consumers' goods in exchange for a better environment and better communal and spiritual background for our industrial lives. There are communal needs such as light, air of a good quality, contact with natural things, which are just as important as drinking water and elementary education and the community must make itself responsible for the provision of these things and must not allow individuals to fend for themselves.

The physical content of the National Plan is based first and foremost on the Principles of Dispersal and Decentralisation of Industries. An important chapter is given to Agriculture, which is considered as a basic industry. The introduction of non-agricultural influx into rural areas, and the "revivification" of agriculture and country districts is made a mainstay of the National Plan. Decentralisation means the movement of industries inside an industrial region to more desirable sites. Dispersal is proposed to areas outside the existing industrial regions. Roads and railways are not to be considered as immovable, but are to be replanned where necessary in order to facilitate dispersal. New post-war building should not be frittered away in housing schemes in connection with existing large cities, but is to be concentrated on the construction of new dispersal settlements. A map of possible reception areas for such settlements is outlined and the possibilities of the Scottish Highlands, etc., are discussed in detail. Transport lines outside the London-Manchester "coffin" will form part of the plan, as well as pipe lines for oil and gas, and the extension of the electricity grid. The deep river inlets of the Thames and the Humber, etc., are not to be considered as factual obstacles, but are to be bridged or tunnelled. For choosing the sites of new settlements an eliminating method is suggested which

Creative Demobilisation, Vol. I, Principles of National Planning, by E. A. Gutkind; Vol. II, Case Studies in National Planning, edited by E. A. Gutkind. The International Library of Sociology and Social Reconstruction. Editor, Karl Mannheim. London. Kegan Paul. 1943. 21s. each volume.

would rule out about 15 per cent. of the surface of England and Wales as unsuitable for settlement. Professor Fawcett and Mr. A. E. Smailes describe this method in detail in a contribution to Vol. II. For the remainder of the land, desirable sites for new settlements or the extension of existing villages and small towns are to be surveyed and new settlements spaced conveniently in a grid of the accepted dimensions.

The countryside is not to be repopulated by any sort of "back to the land" movement. In fact, Dr. Gutkind subscribes to Mr. Thomas Sharp's description of such tendencies as "dangerous nonsense." Apart from a slight increase in the agricultural population owing to a tendency for the more intensive forms of agriculture and horticulture to develop with the dispersal of settlement, he foresees a concentration of small and socially unsatisfactory villages and outlying farms into fewer and better provided villages. He advocates the introduction of non-agricultural work into villages as a means of balancing and diversifying the life in these villages, and in order to provide seasonal part-time occupation. To the author, the task is not to bring the townsman back into the country, but to make the "nomadic urban existence more sedentary and personal."

There is no doubt that dispersal will in itself be a boon to agriculture and if the location of new settlements is considered in conjunction with local agriculture, many districts which have hitherto been unable to make full use of their soil owing to the distance of markets, would become valuable agricultural land as soon as a town is brought into the district. Gutkind would reserve the very best agricultural land, but would on the whole support Professor Ashby's claim that it is cheaper in social cost to improve unsuitable farm land than to make unsuitable land ripe for building purposes. Dr. Gutkind advocates Sir Daniel Hall's ideas of considering the whole of Britain as one big estate, to be parcelled out anew according to the best land use, providing new farms and road, much as the agricultural revolution of the eighteenth century had done once before.

The settlements, old and new, would be linked by a system of parkways. The American idea of separate one-way traffic lanes and wide green bands flanking the main highways is wholeheartedly adopted. The highways and their park areas link the hearts of all built-up areas and serve to separate the sections, or use zones, of towns. Green wedges, green bands or arteries connect the insides of towns with green belts which definitely limit the growth of the towns. The green belts contain farms for the production of fresh food for the towns and the villages connected with this food production. The green wedges contain recreation and horticultural open spaces, roads and railway lines.

Industry, with factories employing if possible not more than 500 workmen, are to be placed on the far side of the highways and railways, arranged and balanced according to the precepts of diversification of basic industries, local industries, linked industries, agricultural industries to provide seasonal balance, minimum shift work, balance for age and sex distribution, and import and export industries.

The residential sections are to be formed into highwayless communities, independent of streets as much as possible, with full use made of high, as well as low and detached buildings, zoned not according to number of dwellings per acre, but according to number of people per acre of dwelling space and of land surface. About 2,000 people would form a neighbourhood unit, with its communal services, the number being arrived at from the number of school children in various age groups which justify schools of their own, and the distances they may walk to their schools. Neighbourhood units are separated by parks and playing fields from one another. The business district is one of the independent sectors of the plan zoned or redeveloped for the purpose.

Van Eesteren's plan for Amsterdam is the object-model for these ideas in a practical form. Other diagrams outline the patterns of his and other current thought on the organism of towns.

This review is an attempt to summarise some of the many ideas and pleas of Dr. Gutkind's volume. Many of his pleas would be more convincing if they were not made with such impatience.

The book attempts to cover all spheres of planning and we know of no other English book that makes a claim to such completeness. A great number of stimulating thoughts and much useful information is conveyed to any reader, whether interested in the general aspect or in some particular field. In some chapters both facts and vision seem workmanlike and reliable; in others one gains the impression that the ground is only tentatively scanned. The result is that one is left with the feeling that there is a consensus of expert opinion that National Planning, regionally executed, is a necessity, but that in practice it will become a success only after we have reached a stage well in advance of the present knowledge and vision.

The second volume contains a collection of expert case studies as interpretations and illustrations of the first volume. It is a good example of a team bringing its mind to bear on the many aspects of planning. The essays are chosen from voluntary contributions to the work of the Demographic Survey and Plan. Perhaps it is not out of place to mention the reviewer's delight in the chapters written by Professor A. W. Ashby. The primary task for the authors of a national plan would be the consideration of the factors underlying the basic dispersal map, which would show the location of reception areas for dispersed industries. Such a map, if based on the principles outlined by Dr. Gutkind, would be the real touchstone of his work. It is to be hoped that experimental areas of some size, say of about 20,000 acres, could be put under the direction of men of his calibre to allow them to prove their ideas in practice.

The second volume contains a great amount of relevant and miscellaneous information. There are chapters on Human Geography, Agriculture, Industry, the Redistribution of Settlement, and appended statistical data on towns of various size groups. The authors are almost all well known to those who follow the current work on planning in print and maps. Mr. Gibson, Mr. Payne and Mr. Mealand are the Town Planning Officers; Mr. Clark, the Planning Officer for Dorset, represents a rural county. Mr. Smailes, Mr. Currie of Dartington, and Mr. D. B. Williamson are some of those who represent the university-trained approach; technical experts report on electrification, and there are reports on rural Scotland, Wales, and the development of a national coastal park in North Cornwall. Interesting tables and figures are contributed by the Henry Ford Institute of Agricultural Engineering on the labour and acreage needed to grow crops for a given population, and by the Association for Planning on Agricultural and Rural Industries.

G. R.

SOME OTHER PLANNING BOOKS

Employment Policy and Organisation of Industry after the War: a statement, issued by Nuffield College, Oxford. Sm. 8vo. 70 pp. Oxford University Press. 1943. 2s.

This "statement" by a group of industrialists, economists and politicians who met in conference under the aegis of Nuffield, has already attracted attention in the press for the comparatively advanced views it expresses on some matters of general industrial policy. Its importance for architects derives from its many references to the place of the building industry in the post-war economic set-up and to the importance of progressive policies in town and country planning. It is stated that the constructional industries are bound to occupy a position of immense strategical importance and that the building industry is, in every sense of the word, a key industry.

The Report suggests that after the immediate post-war period when the industry will have to work up to its full capacity to meet urgent demands—many desirable projects having to wait their turn—there must be regulation of the volume of different types of work so as to offset tendencies to cyclical fluctuations, *i.e.* what in 1929-39 terms we called "boom and slump." Building can be used as a corrective, whereas in the past it has been allowed to exaggerate the fluctuations. (R.I.B.A. members will remember Sir Raymond Unwin's attempts as President to impress this view on the Government during 1931-33.)

The statement recommends that State policy should be directed to securing a high and increasing level of output immediately after the war, the organisation of continuing long-term programmes with provision for speeding up or slowing down as part of the deliberate policy of keeping total investment at a satisfactory level.

There must be effective control over materials prices and over contract prices. This, in relation to price regulation and monopoly, is considered at some length.

The State should consider the possibility of providing some necessary materials itself, using the war-time device of Agency Factories. Royal Ordnance and other factories could be adapted for this purpose.

The Nuffield College view of town and country planning has received wide attention already: their generally known emphasis on the implementation of the Barlow, Scott and Uthwatt Reports are once more presented here.

Rebuilding Britain: A Select List of Books on Town and Country Planning. Sm. 8vo. 20 pp. Bristol Public Libraries. 1943.

Connoisseurs of popular bibliography have their eyes constantly open to watch the flow of book lists prepared by Mr. James Ross, Bristol City Librarian, and his staff. There can be few important subjects which have at any time been topical and popular in their appeal which have not been enlightened by a Bristol list.

The town and country planning list is as good as any; it contains between three and four hundred references under the headings, Town and Country Planning, Special Areas, Architecture and Building, Domestic Architecture, Housing and Law, Parks and Rural Preservation.

The selection is wide, from sociology to technology, and every section is excellently built up without "pot boilers." Admirable editorial discretion has been shown in making the selection of the earlier books. The architectural books make up a better list than could probably be found in any "architectural" library in the country, apart from the R.I.B.A., and the list has suggested a few useful additions to our stock.

By some chance a few brief explanatory notes have crept in which might well have been omitted or preferably extended to all items.

Planning and Reconstruction Year Book 1943. Advisory Editor, F. J. Osborn. 8vo. 368 pp. (London: Todd Publishing Co. 1943. 21s.)

The second edition of the Year Book follows the general lines of the first, but more technical articles are included and a section outlining the existing position of planning by quotations or abstracts from official statements. A list of planning films is added, and generally the amount of information given has been increased. The technical articles deal with prefabrication and the uses of various special materials in post-war building, problems of lighting and heating and noise, domestic equipment and furniture. There are short articles on planning and housing in the U.S.S.R., Poland, New Zealand, Sweden and the United States.

Some Technical Books

National Building Code of Canada. (N.R.C. No. 1068). 8vo. 422 pp. 1941. Ottawa. \$1.

This Code has been prepared under the joint sponsorship of the National Housing Administration Department of Finance and the Codes and Specifications Section National Research Council of Canada. It was commenced in peacetime and completed in wartime, a fact upon which the authors are to be congratulated. When peace comes the Code is ready to be adopted by the authorities who will administer it.

The Code covers a wide field and embraces administration, structural requirements in wood, steel, reinforced concrete, walls, partitions, floors, roofs and roof coverings. Fire protection is exhaustively dealt with, together with regulations for electric installations. Requirements in connection with health, sanitation, lighting, heating and ventilation are set out, together with plumbing.

An important section is that dealing with thermal and sound insulation, and one of the appendices contains sound transmission loss values, or sound reduction, in typical wall and floor construction. The Code

prescribes a minimum sound reduction for dwelling units within a building, a definition which might exclude party walls between houses, though presumably this was not the intention. Another appendix contains in great detail a standard plumbing by-law. There is a very complete index prepared in such a way that the Code reference to any subject can be readily found from the Code paragraph numbers in the index.

There is no doubt that building codes are long overdue and that the difficulties of those connected with the building industry will be simplified in those countries which recognise that fact. In this country it is at present necessary to refer to many Acts of Parliament, by-laws and regulations in order to ascertain the limitations relating to any proposed building. A repeal of all such Acts, by-laws and regulations and the institution of a building code must be the aim of those responsible.

The R.I.B.A. Reconstruction Committee in their interim report, published in the JOURNAL of November 1941, recommended the formulation of a National Building Code. No doubt this recommendation is being acted upon.

Congratulations to Canada.

C. W.

The Protection of Structures Against Lightning British Standard Code of Practice C.P.1: 1943. Codes of Practice Committee for Civil Engineering, Public Works and Building of British Standards Inst. 1943. 3s. 6d.

This Code has been drafted at the request, initially, of the Society for the Protection of Ancient Buildings and is intended as an authoritative general guide—the first to be issued since 1905 when the original recommendations of the Lightning Rod Conference of 1881 were revised. Recently there have been great advances in our knowledge of lightning and the related science of atmospheric electricity which are made of effect in the present Code.

The Code "covers minimum equipment and observances necessary to prevent or at least minimise, the risk of damage which lightning may cause to structures and their occupants and contents, to livestock and trees."

After a section of definitions, including definition of the Zone of Protection, the actual techniques are described in detail as recommended for various situations and building types. Materials for conductors and methods of fixing are specified and the Code ends with two Appendices on methods of testing and explanatory notes on some of the recommendations in the Code.

The Code is an important and essential document which should be in every architect's office. It supplants all previous publications on the subject.

Elementary Surveying, by Arthur Lovat Higgins, D.Sc., A.M.Inst.-C.E. 8vo. 156 pp. London: Longmans, Green. 1943. 6s.

This is a clear and simple text-book, which covers the syllabus of the Elementary Surveying papers in the General School Examination of the University of London, and is adequate in its scope for the needs of most architectural and planning students. Dr. Higgins is University Reader in Civil Engineering in London University.

The chapters are: Fundamental Principles; Chain Surveying; Plotting Plans and Maps; Field Geometry; Levelling; Angular Levelling; The Compass; Plane Tabling; Contouring; Areas and Volumes and finally Theodolite Surveying. Each chapter ends with a series of field and class exercises.

The book is one that can be recommended for its compactness, simplicity, the quality of exposition and not least for its price.

A Guide to the Development of Children's Day Care Units in War-time. By National Association of Day Nurseries. Reprinted by Child Welfare League of America. 8vo. 40 pp. (New York: National Association Day Nurseries. 1943. 50 cents.)

Concerning Play-yard Surfaces. By National Association of Day Nurseries. 8 sheets mimeographed. 1943.

The guide is primarily intended for day nursery organisers, but it includes incidental information useful to designers, particularly as concerns planning, health conditions, heating, lighting and ventilation and equipment.

The memorandum on play-yard surfaces is more essentially technical from an architectural point of view. Various surfaces natural and prepared are considered seriatim and their reported advantages and disadvantages stated. Various proprietary surfacing materials obtainable in America are listed with costs per square yard.

Review of Periodicals

1942-43—IV, concluded

DETAILS, CRAFTS, FITTINGS, continued

ARCHITECTURAL REVIEW, 1943 Aug., pp. 30, 41-8 :
"Meals and murals." Article by Eric Newton on mural paintings in British communal restaurants. A superbly illustrated survey of the most ambitious British war-time art enterprise—mostly work by younger artists and art school students.

STUDIO, 1943 June, pp. 1-10 :
Mural painting : article, "State patronage of wall painting in America," by John Rothenstein.

ARCHITECTURAL REVIEW, 1943 May, pp. 131-2 :
Medieval and modern symbolism : article by M. D. Anderson.

THEORY

ARCHITECTURAL REVIEW, 1943 May, p. 133 :
Illustrated note on Changes in level : "an attempt to re-discover the architectural nuance and reconsecrate it to the modern ideal."

ARCHITECTURAL REVIEW, 1943 Aug., p. 52 :
"Time, trees and architecture." Note by L. Manasseh and S. Busas.

ARCHITECTURAL REVIEW, 1943 July, p. 24 :
"Steps in engineering" : note on the development of conscious aesthetic in use of forms originally purely functional. Illustrated by water towers, etc., and simple masonry structures.

PRESERVATION

WERK (Zürich), 1943 March, pp. 81-9 :
The restored Bern City Hall, first built 1406, described and illustrated. ARCHITECTS' JOURNAL, 1943 May 20, pp. 328-9 :

BUILDER, 1943 May 21, p. 449 :
Theatre Royal, Bristol, restored. Photos and descriptive note. BURLINGTON MAGAZINE, 1943 July, p. 159 :
The problem of the historic country house—the preservation policy of the National Trust—possible public uses. Editorial.

JOURNAL OF THE AMERICAN SOCIETY OF ARCHITECTURAL HISTORIANS, 1942 Oct., pp. 30-1 :
Restoration of the Manigault House, Charleston, S. Carolina. Interesting description of methods by B. St. J. Ravenal.

HISTORY

JOURNAL OF AMERICAN SOCIETY OF ARCHITECTURAL HISTORIANS (Troy, N.Y.) :
Architectural history. This journal includes a current classified bibliography compiled by Ruth V. Cook, librarian, School of Design, Harvard University.

COUNTRY LIFE, 1943 July 2, pp. 24-6 ; July 16 :
Hampstead village. First of series of illustrated articles, by Muriel Barron.

COUNTRY LIFE, 1943 Aug. 6, pp. 238— :
Landmarks of Sicily. Article by John Horne, illustrated by photos of Greek temples, Monreale Cloister, etc.

PENCIL POINTS (N.Y.), 1943 April, pp. 62-4 :
"On Architecture and Architects," by Bernard Rudofsky. Paper to Fogg Museum in course of *Brazil Builds* exhibition : study of Brazil architecture and vitality of modern movement.

JOURNAL OF THE R.I.B.A., 1943 May, pp. 155-8 :
"Brazil Builds" : review of book on historical and contemporary Brazilian architecture. Special reference to protection from sun heat. Illus.

REVISTA DE ARQUITECTURA (Buenos Aires), 1943 Apl., p. 159 :
Argentine historical monuments. Maps of Buenos Aires, Cordoba Salta, Santa Fe, Tucuman and Jujuy, showing buildings scheduled by State.

ARQUITECTURA (Montevideo), 1943, Special Number :
Uruguay architecture. Illustrations of many recent buildings from Biennial Exhibition of Sociedad de Arquitectos.

COUNTRY LIFE, 1943 July 9, pp. 62-4 :
Old bridges of Scotland. Article and photos by Will F. Taylor.

JOURNAL OF THE ROYAL SOCIETY OF ANTIQUARIES OF IRELAND, 1943 June 30, pp. 30-9 :
Some eighteenth-century Irish tombstones, by Ada K. Longfield.

COUNTRY LIFE, 1943 July 30, p. 210 :
Fifteenth-century house : corr. and photo of illuminated MS, showing building of French or Flemish timber house.

ARKITEKT (Istanbul), 1943 No. 11/12, pp. 269-76 :
Hittite architecture. Article by Dr. R. Neumann. Illus.

ARCHITECTURAL REVIEW, 1943 Aug., p. 55 :
Colonial East and Colonial West : note on similarity of Palladian buildings in Russia and U.S.A.

ARCHITECTURAL REVIEW, 1943 May, p. xxxix :
Charles Cameron : letter from Mrs. T. Tchernavin contesting some points in article by G. Lukomski in A.R. January '43.

ARCHITECTURAL REVIEW, 1943 July, pp. 15-18 :
"Queen Anne" taste and aestheticism : article by Dudley Harbron [F.], illustrating work by Norman Shaw, E. R. Robson, Nesfield, E. W. Godwin, Tarver, M. B. Adams, E. J. May.

ARCHITECTURAL REVIEW, 1943 Aug., pp. 31-4 :
"A short Pugin florilegium." Compiled by N. Pevsner. A critical Pugin anthology, well illustrated from Pugin's works.

WERK (Zürich), 1943 May, p. 157 :
Le Corbusier : biographical appreciation, by Alfred Roth, one of leading Swiss members of C.I.A.M. Illustrated by Le Corbusier drawings and designs.

BUILDER, 1943 July 30, p. 87 :
Italian architecture under Mussolini.—"Obituary of a dictator." Article by M. S. Briggs [F.].

THE OCTAGON, JOURNAL OF THE AMERICAN INST. ARCHITECTS, 1943 February, p. 13 :
Ralph Adams Cram, 1869-1942. Memoir by Charles D. Maginnis.

PENCIL POINTS (N.Y.), 1943 Mar., and subsequent issues :
The Architecture of the Future. Articles by Talbot F. Hamlin. Pt. 1 : Post-war design, Pt. 2 : Techniques, materials, design.

ARCHITECTURAL FORUM, 1943 May, pp. 71-152, 189 :
"New Buildings for 1944." Designs by 33 American architects for buildings in a hypothetical town of 70,000. Buildings include : Hotel (Stonorov & Kahn) ; museum (Mies van der Rohe) ; city hall (Eames) ; high school (Perkins, Wheeler & Will) ; trade school (Walker) ; shopping centre (Gruenbaum & Krummek) ; movie (Koch & Johansen) ; restaurant (Schladermunt) ; airport (Raymond) ; bus terminal (Holabird & Root) ; road service station (Lescage) ; flats (Chermayeff) ; hospital (Stubbins) ; health faculty (Rosenfield & Brienes) ; market (Carr) ; church (Rich) ; shops (Moore & Hutchins ; Reisner & Sharp).

BUILDER, 1943 July 23, pp. 67-8 :
"Planning for fantasy : strange reactions to an exhibition" of a Utopian "Britain Tomorrow" exhibition by Ian Walker. Reviewed by R. Myerscough-Walker.

ARCHITECTURAL VOCATION, PROFESSIONAL PRACTICE

PENCIL POINTS (N.Y.), 1942 Sept., pp. 42-5 :
"Who'd serve must search." Article by A. C. Holden on recognition of the architect's status in contemporary society.

BUILDER, 1943 February 12, p. 147 ; March 19, p. 257 ; April 23, p. 365 :
Architect and engineer. Leading articles and correspondence in these and intervening numbers.

JOURNAL OF THE SOCIETY OF ENGINEERS, 1943 Jan./June, pp. 49— :
"Federation of the professions." Article by A. W. Crampton, F.S.I., introduced by F. Parfett, Vice-President, on co-operation between structural and related institutions.

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS, 1943 July, pp. 206-9 :
The activities of the R.I.B.A. during the war and the place of the architect in the post-war world. Paper to R.I.B.A. by Michael Waterhouse [F.], Hon. Secretary, June 29.

OFFICIAL ARCHITECT, 1943 May, p. 204-5 :
Codes of Practice. Note on the report of the C— of P— Committee of the Ministry of Works.

BUILDER, 1943 July 16, pp. 53-4 :
The cost of building : analysis of present and pre-war costs, by S. Hookway.

ARCHITECT AND BUILDING NEWS, 1943 July 30, pp. 72-4 :
Building costs : report of debate in House of Commons.

ARCHITECTS' JOURNAL, 1943 May 27, pp. 352-4 :
Ministry of Works Standard Prices Schedule, reprinted from a recent M.O.W. publication.

JOURNAL, CHARTERED SURVEYORS' INSTITUTION, 1943 June, pp. 551 :
The position of the quantity surveyor in relation to suggestions for a group system of professional operations in building projects : memo. by the Quantity Surveyors' Committee of C.S.I.

JOURNAL, CHARTERED SURVEYORS' INSTITUTION, 1943 May, pp. 509-15 ; June, pp. 547-50 :
Schedule-contracts : are they in the best interests of the building industry : discussion at Quantity Surveyors' General Meeting opened by E. C. Harris.

ARCHITECTS' JOURNAL, 1943 May 20, p. 340 :
JOURNAL OF THE R.I.B.A., May, p. 161 :
Scale of charges for the 3,000 houses to be built for agricultural workers.

ALLIED ARTS

ARCHITECTS' JOURNAL, 1943 June 3, pp. 371-2 ;
OFFICIAL ARCHITECT, June, pp. 255 ;
Public taste and public design : lecture to Design and Industries Assn., by Tom Harrison and D. Behrens, of Mass Observation.

OFFICIAL ARCHITECT, 1943 July, pp. 295-7 :
The future of industrial design. Paper by Herbert Read to Design and Industries Association.

ARCHITECTURAL REVIEW, 1943 July, pp. 2-12 :
"Baroque and the National Shrine." Review by Sir Kenneth Clark of the Warburg Institute's photographic survey of the sculptured memorials in Westminster Abbey, illustrating work by Wm. Kent, Roubiliac, Rysbrack, Cheere, Bacon, Flaxman and Banks.

ARCHITECTURAL FORUM (N.Y.), 1943 June, p. 4 :
Furniture. Nineteenth-century precedents for ply chair, compact bedroom unit, etc. Photos.

CALIFORNIA ARTS AND ARCHITECTURE (Los Angeles), 1943 June, pp. 20-21 :
Cheap domestic furniture in plywood, designed for war dormitories, by C. Coggeshall.

BUILDING (generally)

JOURNAL OF THE R.I.B.A., 1943 June :
Training of the post-war builder : note by a member of the Architectural Science Board on Ministry of Works Report.

BUILDER, 1943 July 23, p. 78 :
Building education : note on series of lectures organised by Association of Building Technicians.

ILLUSTRATED CARPENTER AND BUILDER, 1943 July 9, pp. 754-8 :
Advanced builders' geometry. First of series by N. L. Rees [A.].

BUILDING, 1943 May, p. 130 :
Post-war construction methods series, No. 12. Ministry of Works Design and Construction by R. V. Boughton. Critical analysis of house design.

CONCRETE, 1943 May, pp. 145-6 :
Building practice of the future. Editorial on reports of M.O.W. Study Committee Reports.

ARCHITECT AND BUILDING NEWS, 1943 July 30, pp. 63 ; 77-80 ;
ARCHITECTS' JOURNAL, July 29, Aug. 5, pp. 90 ;
BUILDER, July 23, p. 69 ; July 30, p. 90 ;
NATIONAL BUILDER, 1943 August, pp. 12-22 :

Post-war building. Reports of congress convened by Building Industries National Council in London July 21 and 22. Speakers included Ministers of Town and Country Planning, Health and Works ; Sir Wm. Jowett, Mr. Attlee, and representatives of building contractors, manufacturers, trades unions, professions. Subjects : Housing ; building industry organisation, and labour and extent of controls ; town planning and building industry ; prefabrication in post-war building ; architect's place in post-war building.

STRUCTURAL ELEMENTS

PROC. AMERICAN SOC. CIVIL ENGINEERS, 1943 March, p. 449 :
Application of Soil Mechanics in designing building foundations, by J. Feld and L. Zeevaert ; includes bibliography of 22 selected periodical articles.

CIVIL ENGINEERING, 1943 June, pp. 123-4, and subsequent issues :
Experimental soil mechanics. Pt. I. Article by R. Allin, M.Inst.C.E.

ILLUSTRATED CARPENTER AND BUILDER, 1943 May 21, p. 560 :
Foundation problems [in small house building] by S. B. Dawes [L.]. First of 3 articles.

ARCHITECTURAL RECORD (N. York), 1943 March, pp. 85-6 :

Folding partitions : 2 "Time-Saver Standards."

BUILDING, May, pp. 122-3 :

ARCH. DESIGN AND CONSTRUCTION, 1943 May, pp. 102-3 :

MASTER BUILDER, May :

Portal frame construction : description of the Glover system for demountable portal truss buildings for spans 10-100 ft. (Further references.)

PENCIL POINTS (N.Y.), 1942 Sept., p. 77 :

Plywood heavy-duty girders : technical data on design.

ARCHITECT AND BUILDING NEWS, 1943 May 14, inset :

Floors and Roofs : English model by-laws, No. 5 in By-laws and building const. series by George Fairweather [F.].

ENGINEERING NEWS-RECORD (N.Y.), 1943 June 17, pp. 62-5 :
Building an 82-acre concrete roof with travelling retractable forms : also article on prefab. laminated timber bowstring trusses, about 44 ft. span.

ARCHITECTURAL RECORD, 1942 Dec., pp. 45-6 :
Air-supported roofs for factories : short description of project for large span thin-membrane steel roofs supported by 1 oz. per sq. ft. air pressure from blowers. Designer, H. H. Stevens.

CONCRETE AND CONSTRUCTIONAL ENGINEERING, 1943 July, pp. 231-4 :

Multiple-arch lightly reinforced concrete factory roof. 31 ft. span, 3 in. arch slab.

ENGINEERING NEWS-RECORD (N.Y.), 1943 April 15, p. 2 :
Glued, laminated wood arches, 60-70-ft. spans, in defence project hall buildings.

ILLUSTRATED CARPENTER AND BUILDER, 1943 July 30, pp. 839-40 :
Roofs and measurement. Article by "Surveyor."

SOUTH AFRICAN ARCHITECTURAL RECORD, 1943 Apl., pp. 80-6 :
Small house roofs. Report on competition promoted by South African Building Controller for suitable roofs of local materials. 1st premium to pre-cast r.c. truss. Followed by article : War-time building—Economy in roof construction, by H. Fyvie [A.].

ARCHITECT AND BUILDING NEWS, 1943 June 11, pp. 159-162 ;

BUILDER, 1943 July 2, p. 7 :

Precast concrete pitched roof construction, a system developed by British Cast Concrete Federation, described and illus. (A.&B.N. :) Also correspondence on "Timberless roof construction," pp. 164-5.

ILLUSTRATED CARPENTER AND BUILDER, 1943 May 7, p. 508 :
Concrete flat roofs, No. 31 in Roof construction series, by Edgar Lucas.

ENGINEERING NEWS-RECORD (N.Y.), 1943 June 3, pp. 108-9 :
Thin-shell concrete roof tested for fire resistance.

SOUTH AFRICAN ARCHITECTURAL RECORD, 1943 Apl., pp. 78-9 :
"Mind your step." Article by B. V. Clarke on stair tread and riser proportions.

BUILDING, 1943 July, pp. 188-9 :

Fenestration, glazing and windows. No. 13 in series, Post-war construction methods, by R. V. Boughton.

BUILDING PRACTICE AND INDUSTRY

BUILDER, 1943 June 11, pp. 511-13 :

"The human foundations of building construction." Report of a conference at Balliol College, Oxford, under auspices of Ministry of Labour.

AGENDA (London School of Economics), 1943 May, pp. 146-152 :
The Building industry after the war : paper by G. D. H. Cole, Director, Nuffield College, Social Reconstruction Survey, examining figures for post-war labour force and training systems. Critical of Ministry of Works' Report on training for the building industry.

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1943 May, pp. 111-2 :
The future of the building industry : speech by Lord Portal in House of Lords.

ARCHITECT AND BUILDING NEWS, 1943 Aug. 6, pp. 91-2 :

Post-war building industry. Paper to T. & C.P.A. by T. P. Bennett [F.].

STRUCTURAL ENGINEER, 1943 May, pp. 159-181 :

Site organisation of a public works contract, by Scott H. Hume, M.I.Struct.E.

MATERIALS

JOURNAL OF THE R.I.B.A., 1943 June, pp. 177-180 :

Fundamental principles of the weathering of building materials, by F. L. Brady, liaison officer, D.S.I.R.-M.O.W.P. Paper in series of A.S.B. lectures at R.I.B.A. on building science.

BUILDING, 1943 June, pp. 150-1 :

New materials : a forecast of their use, by T. W. Parker, M.Sc., Ph.D.

ARCHITECT AND BUILDING NEWS, 1943 June 25, pp. 189-192 :

Building materials and post-war building technique : three articles. "Plastering problems of the 1920's will not recur." by Edwin Gunn [A.], on plaster and "wall" boards. "No post-war timber shortage," by B. A. Jay. "The composition of plastics."

ENGINEERING NEWS-RECORD (N.Y.), 1943 May 20, pp. 82-5 :

Plywood : methods of manufacture.

ARCHITECT AND BUILDING NEWS, 1943 Aug. 6, p. 84 :

The art of thatching, by Edwin Gunn.

ARCHITECTURAL RECORD (N.Y.), 1943 April, pp. 54-60 :

Plastics. Article by R. F. Marshall on nature and potential uses in building and building equipment.

BUILDING, 1943 May, pp. 127-9 :

Plastics and their application to the building industry ; by H. H. Lusty. Paper to Leicester Soc. Arch.

JOURNAL OF ROYAL SOCIETY OF ARTS, 1943 July 23, pp. 421- :
The influence of plastics on design, by John Gloag [Hon.A.], with discussion partly on place of architect as industrial designer.

CONCRETE, 1943 May, pp. 159-67 :

Effects of the addition of calcium chloride to Portland cements and concretes ; by A. J. Newman of the Building Research Stn.

CONSTRUCTION, including PREFABRICATION

ARCHITECTS' JOURNAL, 1943 July 1, pp. 7-10; July 8, pp. 23-6: Continuity in construction, by Dr. K. Hajnal-Konyi, M.I.Struct.E. (Also bibliog. in Sept. 2 issue, p. 172.)

ARCHITECTURAL RECORD (N.Y.), 1943 April, pp. 50-3:

PENCIL POINTS (N.Y.), 1943 April, pp. 36: Prefabrication system ("Packaged Building"), designed by Gropius and Wachsmann for General Panel Corporation, using timber grid frame on 3 ft. 4 in. module, members joined with ingenious connector; partition and ext. panelling of any material timber-framed. P. POINTS article most detailed, illustrating variety of building types. An important contribution to prefab. technique.

ARCHITECTURAL FORUM (N.Y.), 1943 April, pp. 51-4:

Pre-fab. house on Nissen hut principle developed: laminated wood arches at 4 ft. covered pulp board with segmental arch outer roof. Accommodates family 4, inc. children opposite sexes. Fully described and illus.

PENCIL POINTS (N.Y.), 1943 April, pp. 36-55, 56-61:

Prefabrication: "Cities while you wait: 'housing' in Washington and Oregon States": Article by W. Gordon on war housing in N. West. Layouts and const. and plan types of houses illustrated. Also "Prefabrication pattern." Article by S. Paul, architect-prefabricator, on "present status and future possibilities of prefab. industry."

ARCHITECTURAL FORUM (N.Y.), 1943 April, pp. 71-86:

Prefabrication: No. 5 in series. P. in wood. Valuable survey of past and present practice, with "directory of war-time prefabricators." Well illus.

ARCHITECTURAL FORUM (N.Y.), 1943 June, pp. 89-96:

Prefabrication. No. 6 in series. "Reengineering"—study of the purely structural contributions towards achievement of better houses at less cost more speedily. Reference to Pierce Fdn. "horizontal plywood" house, T.V.A.-Shulte "trailer" house, General Panel Corp. (Gropius-Wachsmann) house.

ARCHITECTS' JOURNAL, 1943 June 17, pp. 391—:

Prefabrication: editorial "Make homes by machine," and discussion in notes, correspondence, etc., partly centred on 1st report of Committee for the Industrial and Scientific Provision of Housing.

ARCHITECT AND BUILDING NEWS, 1943 June 25, pp. 218-9:

Bye-laws and prefabrication. Article on extent to which existing law obstructs prefabrication building.

CALIFORNIA ARTS AND ARCHITECTURE (Los Angeles), 1943 June, pp. 25-7:

A prefabrication vocabulary, by R. M. Schindler. Simple subjective definitions of words and phrases used in prefab. talk.

ARCHITECTURAL RECORD, 1942 Dec., pp. 64-5:

Expansion joints for large buildings; by John Schurman, of Albert Kahn. Description and illus.

ENGINEERING NEWS-RECORD (N.Y.), 1943 May 4, pp. 121-3:

Strength of nailed plywood joints subjected to lateral loading.

JOURNAL OF THE AMERICAN SOCIETY OF ARCHITECTURAL HISTORIANS (Troy, N.Y.), 1942 Oct., pp. 3-29:

An examination into the invention of the balloon frame, by Walker Field. A scholarly study of the characteristic light frame-building of America from its origins to its technical associations with sky-scraper construction. Very fully annotated and bibliographical references.

ARCHITECT AND BUILDING NEWS, 1943 June 25, p. 201:

"No-Fines" open-textured concrete: description and illustration of typical structure, by G. Fairweather [F.].

ARCHITECTURAL DESIGN AND CONSTRUCTION, 1943 July, pp. 141-2:

Cellular concrete. Use in housing by Scottish Special Housing Association, described by L. J. Pond.

ILLUSTRATED CARPENTER AND BUILDER, 1943 July 30, p. 842:

Glass bricks in modern building constn. Article by R. Forman.

ENGINEERING NEWS-RECORD, 1943 April 22, pp. 67-70:

Concrete paving aerodrome runways in near-zero weather in Pacific N.W. America.

CIVIL ENGINEERING, 1943 July, pp. 150-2:

Timber construction with steel connectors. Article by Holman Harvey on American practice. Illustrated by large blimp hangar.

ARCHITECTS' JOURNAL, 1943 Aug. 5. Information sheet 904:

Building board. Wall sections in "Insulwood," with thermal transmission figures.

SANITARY SCIENCE AND EQUIPMENT

JOURNAL OF ROYAL SANITARY INSTITUTE, 1943 July, pp. 132—:

Small sanitary structures in the tropics: the need for care in design. Paper by R. H. Thomas, Health Inspector, N. Rhodesia. Drainage, closets, grease trap, etc.

ENGINEERING NEWS-RECORD (N.Y.), 1943 May 6, pp. 116-7: Army lavatory—urinal, shower, heater room—designed for water economy.

JOURNAL OF LONDON ASSOCIATION OF BUILDERS' FOREMEN AND CLERKS OF WORKS, 1943 June, pp. 93-7:

"Towards a simpler electrical installation": short article on possible developments, by P. Honey.

ARCHITECTURAL RECORD (N.Y.), 1943 May, pp. 54-9:

"Lighting for seeing." Article by Matthew Luckiesh, D.Sc., Director, G.E.C. Lighting Bureau. Useful article emphasising consideration of whole interior and not only light source brightness. Illustrated domestic and factory lighting.

ARCHITECT AND BUILDING NEWS, 1943 July 16, pp. 39-40:

Lighting: digests of lectures by H. C. Weston, Investigator to Industrial Health Board of Medical Research Council, R. O. Ackerley, and P. V. Burnett [F.] to R.I.B.A. Architectural Science Board.

INDUSTRIAL HEATING ENGINEER, 1943 July, pp. 62-3:

Fluorescent lighting in engineering works in S. England.

ARCHITECT AND BUILDING NEWS, 1943 June 18, p. 179:

ARCHITECTS' JOURNAL, June 10, pp. 386—; July 15, pp. 45, 47-8: Heating and ventilating: two lectures in Architectural Science Board's series at R.I.B.A. (A. & B.N.): digests. (A.J., July 15:) Paper by Dr. T. Bedford, Investigator to Industrial Health Research Board; (June 10, July 15) by Dr. A. C. Pallot.

JOURNAL OF INSTITUTION OF HEATING AND VENTILATING ENGINEERS, 1943 June, pp. 480-4:

Design factors in heating and hot water supply, etc.: with special reference to hospital installations, first part. Article by H. Swaine.

HEATING AND VENTILATING ENGINEER, 1943 May, pp. 436-45: District heating: the Parkchester housing project, New York, described by Cyril Tasker, M.AMER.SOC.H. AND V.E. Illus.

ARCHITECT AND BUILDING NEWS, 1943 June 25, pp. 214-5, 217:

District heating. Article by Bertram Baden, with reference to use in housing schemes.

ARCHITECTS' JOURNAL, 1943 July 1, Information Sheet 901:

Domestic water heating: economic aspect.

ELECTRICAL SUPERVISOR, 1943 July, pp. 379-81:

Domestic water-heating installations. Article.

ARCHITECTURAL FORUM (N.Y.), 1943 June, pp. 6-7:

Air-conditioning. "Serval" gas-fired domestic air-conditioning.

HEATING AND VENTILATING ENGINEER, 1943 July, pp. 2-4:

Ideal atmospheres: fresh air in relation to industrial efficiency; paper by G. M. Davies, District Health Officer, Bristol. Study of temperature, relative humidity, air changes, etc. Similar problems in relation to hospital design discussed in second part of article on "Design factors," by H. Swaine, pp. 4-7.

BUILDER, 1943 May 14, pp. 431-4:

Garchey system of refuse disposal. Quarry Hill flats installation, Leeds, described by R. A. H. Livett [A.], Housing Director. Fully illus.

PROOFING, INSULATION

BUILDING (Sydney, N.S.W.), 1942 July, pp. 45-53:

"Insulation takes the limelight," partial reprint of U.S. Bureau of Mines report "Home Insulation, an effective conservation and national defence measure."

OCTAGON, JNL. OF AMERICAN INST. ARCHITECTS, 1943 February, pp. 19-21:

Lessons from the Cocoanut Grove (Boston) Night Club fire. Short notes on fire precautions prompted by fire in which 500 lives were lost.

ARCHITECTURAL RECORD (N.Y.), 1943 May, pp. 79-82:

Basement waterproofing: time-saver standards.

ENGINEERING NEWS-RECORD (N.Y.), 1943 May 20, pp. 70-3:

Winter protection for construction. Article describing various systems used for protection of army hospital structure in North.

STRUCTURAL ENGINEER, 1943 July, pp. 273-84:

Damp brick walls: draft report by committee of Institution of Structural Engineers, including report on experiments. Illustrated. Bibliography.

ARCHITECTS' JOURNAL, 1943 July 15, Information Sheet 902; Sept. 2, Is. 909:

Heat insulation. Construction and comparative efficiency of "Insulwood" thermally insulated floors. (Sept. 2:) Walls.

A.R.P., WAR DAMAGE, including REPAIR

AMERICAN CITY, 1943 April, pp. 52-3:

Camouflage [tree] planting: article by Marjorie Sewell.

ARCHITECTURAL REVIEW, 1943 July, p. 19:

Canterbury bomb damage. Illustrated.

JOURNAL OF THE R.I.B.A., 1943 May, pp. 160-1 :

The London Building Act and re-erection of bombed buildings : case to Counsel and opinion on London Building Acts, 1930, Sect. 13 and 22.

INSTITUTE OF CIVIL DEFENCE JOURNAL, 1943 April, pp. 97-110 :

Industrial civil defence, by S. T. G. Elliott, F.S.I. Summary of latest practice.

BUILDER, 1943 June 18, pp. 534-6 :

Protected emergency rest centre, Bootle : W. A. Harrison, Borough Engineer, W. C. Perce [A.], Chief Architectural Assistant. Three sites, with sleeping accommodation for 1,392 and administrative buildings. (Further and more specific reference.)

ENGINEERING

STRUCTURAL ENGINEER, 1943 July, p. 285 :

The place of the engineer in post-war planning and reconstruction : discussion, following paper by H. Jackson, published in October issue.

JOURNAL OF INSTITUTE OF MUNICIPAL AND COUNTY ENGINEERS, 1943 July 20, p. 25 :

The outlook for the municipal engineer. Paper to conference by H. J. Manzoni, City Engineer and Surveyor, Birmingham.

TOPOGRAPHY

COUNTRY LIFE, 1943 June 23, pp. 156-9 :

Newbury, Berks. described by J. D. U. Ward in Old Towns Re-visited series, VII. Illustrated by A. J. Campbell-Cooper.

PLANNING, RECONSTRUCTION (physical and socio-logical)

OCTAGON, JNL. OF AMERICAN INST. ARCHITECTS, 1943 March, p. 8 : Bibliography on planning—Pt. I compiled by Planning Committee of Washington, D.C. Chapter. Selected list of about 50 items under heads, General, Social, Economic and Political, Urban.

TOWN AND COUNTRY PLANNING (including WAR DAMAGE REPLANNING), GARDENS

BUILDING, 1943 May, pp. 118-20 :

Functional planning : article by Arnold Whittick urging need for planning "for day-to-day needs of the people and not pomp and parade."

JOURNAL OF THE ROYAL ARCHITECTURAL INSTITUTE OF CANADA, 1943 June, pp. 81-5 :

Shall we rebuild without a plan, by Ralph Tubbs. Article from CURRENT AFFAIRS, British Army journal.

ARCHITECTS' JOURNAL, 1943 Aug. 5, pp. 91-4 ; Aug. 12, pp. 107-10 ; Aug. 19, pp. 125-8 :

Physical planning. First article in new series, a planning diary from 1909-29 ; second article 1930-43 ; third article 1943-44.

STRUCTURAL ENGINEER, 1943 July, pp. 260-72 :

"The professional approach to planning" [land, building enterprise, materials supply, etc.], by C. A. Harding [F.]. Survey of some of the problems the peace-time service of which must be planned.

AGENDA (LONDON SCHOOL OF ECONOMICS), 1943 Feb., pp. 11-25 [entry delayed] :

Planning—three reports (Barlow, Uthwatt, and Scott) : by Prof. J. Harry Jones.

ARCHITECTURAL RECORD, 1943 March, pp. 49-56 :

"Britain's plans are bold." Article by D. Haskell describing provisions of Barlow, Scott and Uthwatt Reports.

ARCHITECTURAL RECORD (N.Y.), 1943 April, pp. 42-9 :

"Britain's plans are bold," Pt. 2. Article by D. Haskell summarising architects' plans and policies, with special reference to R.I.B.A. "Rebuilding Britain" exhibition.

TOWN AND COUNTRY PLANNING, 1943 Spring, p. 36 :

"To build or to plan?" Memorandum by T. and C. P. Assn. to Minister of Town and Country Planning urging need for Government statement on planning principles prior to start being made on land acquisition and building.

TOWN AND COUNTRY PLANNING, 1943 Spring, pp. 10-17 :

Housing, town planning and full employment. Article by F. J. Osborn.

ARCHITECT AND BUILDING NEWS, 1943 21 May, pp. 116-17 :

ARCHITECTS' JOURNAL, 20 May, pp. 330-6 :

BUILDER, 21 May, p. 457 :

Town and Country (Interim Development) Bill. Report of 2nd reading debate in House of Commons on 11 May.

JOURNAL OF THE TOWN PLANNING INSTITUTE, 1943 May-June, p. 148 :

Town and Country Planning (Interim Development) Bill : commentary by Desmond Heap.

NATIONAL BUILDER, 1943 July, pp. 184-5 :

Town and Country Planning (Interim Development) Act, 1943. Article critical of "restrictive" nature of Act.

JOURNAL OF THE TOWN PLANNING INSTITUTE, 1943 May-June, pp. 141-8 :

Planning for reconstruction : the data required. Paper by Prof. P. Abercrombie [F.] and discussion.

JOURNAL OF ASSOCIATION OF ENGINEERS AND ARCHITECTS IN PALESTINE (Tel Aviv), 1943 March, pp. 1-2 :

Post-war planning problems in Palestine : paper by H. Kendall [A.], Government Town Planning Adviser, Palestine. (Hebrew translation.)

JOURNAL OF THE ROYAL ARCHITECTURAL INSTITUTE OF CANADA, 1943 June, p. 93 :

Recommendations of R.A.I.C. for a post-war planning authority in Canada.

ILLUSTRATED CARPENTER AND BUILDER, 1943 June 25, p. 710 :

Planning (town and country) policy and the builder, by J. J. Brooks, A.M.P.T.I., A.M.Inst.M. & Cy.E.

JOURNAL OF THE R.I.B.A., 1943 May, pp. 147-50 :

Architecture and planning : lecture by W. H. Ansell [President] at Rebuilding Britain Exhibition.

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS, 1943 July, pp. 203-6 ; Aug., pp. 234-5 :

Town planning and architecture. Addresses by W. S. Morrison, M.P., Minister of Town and Country Planning, and H. G. Strauss, M.P., Parliamentary Secretary, to R.I.B.A. Council, June 29.

BUILDER, 1943 June 25, p. 562 :

Land ownership : compensation, betterment, Uthwatt Report, etc. : paper to Incorporated Society of Auctioneers, by Sir Gwilym Gibbon.

JOURNAL OF THE CHARTERED SURVEYORS' INSTITUTION, 1943 July, pp. 22-32 :

Uthwatt Committee Report. First and second memoranda of commentary and criticism submitted by the C.S.I. to the Minister of Works and Planning and Minister of Town and Country Planning, Jan. 1943 and June 1943.

PENCIL POINTS (N.Y.), 1943 May, pp. 77-80 :

Population distribution : centralisation v. decentralisation. Discussion on Urbanism No. 5 at Columbia University, opened by L. A. Thompson Director, Population Study, Virginia State Planning Board.

ARCHITECTS' JOURNAL, 1943 May 20, p. 339 :

Regional planning and development. Lecture by H. V. Lanchester [F.], last in series organised by R.I.B.A.

BUILDER, 1943 July 9, p. 32 :

London's past and future. Lecture by W. R. Davidge [F.].

ARCHITECT AND BUILDING NEWS, 1943 July 2, p. 10 :

"A London Regional plan of 90 years ago," by John Martin, c. 1860. Note by W. R. Davidge [F.] on a map from R.I.B.A. Library.

ARCHITECT AND BUILDING NEWS, 1943 July 16, pp. 29-32, and subsequent issues ;

ARCHITECTS' JOURNAL, July 15, pp. 33-7, 39-44 ;

BUILDER, July 16, pp. 41, 43-50 ;

BUILDING, Aug., pp. 195-208 ;

COUNTRY LIFE, July 16, pp. 106-8 ;

JOURNAL R.I.B.A., July, pp. 195-201 ; Aug., pp. 227-34 ;

NATIONAL BUILDER, Aug. ;

TOWN AND COUNTRY PLANNING, Summer, pp. 64-6 :

County of London plan abstracted and reviewed (in Bdr. by Dr. H. V. Lanchester [F.]). Housing, slum clearance, community and neighbourhood planning, open spaces, parkways, density zoning, transport. A. & B.N. : Subject by subject. (J. R.I.B.A., Aug. :) Reviewed by W. R. Davidge [F.].

ARCHITECT AND BUILDING NEWS, 1943 June 4, pp. 142-50 ;

ARCHITECTS' JOURNAL, June 10, pp. 379-84 ;

ARCHITECTURE ILLUSTRATED, May ;

BUILDER, June 4, pp. 491-6 ;

COUNTRY LIFE, June 11 ;

NATIONAL BUILDER, June, pp. 170-3 :

London Plan : the Exhibition at the National Gallery of the London Regional Reconstruction Committee's plans. Illus. and described (in A. & B.N. criticism by Sir Gwilym Gibbon, in A.J. by "G.M.K.").

JOURNAL OF THE R.I.B.A., 1943 June, pp. 170-6 :

Greater London : towards a master plan. Synopsis of the Report of the London Regional Reconstruction Committee. Illustrated.

TRANSACTIONS OF THE CHARTERED SURVEYORS' INST. (Suppt. to JOURNAL), 1943 May, pp. 32-44 :

Scott Committee on Land Utilisation in Rural Areas : discussion on report and 2 papers : Scott Report as it concerns the agricultural industry by J. A. Arnold-Forster, and Scott Report : location of industry and town planning by J. P. Rhys.

JOURNAL OF THE ROYAL INSTITUTE OF BRITISH ARCHITECTS, 1943 July, pp. 210— :

Planning of Rural Areas. Paper by Thomas Sharp [L.] to R.I.B.A. The townsman's demands of the countryside ; industry in the country ; the village pattern ; agriculture.

- BUILDER, 1943 June 18, p. 533 :
Planning a county. Paper to Town Planning Institute, by Gordon E. Payne, County Planning Officer, Gloucestershire ; and discussion.
- ARCHITECTS' JOURNAL, 1943 June 24, pp. 418-9 :
BUILDER, June 4, p. 498 :
Urban Britain after the war. Paper to A.A. by J. B. Priestley.
- ARCHITECT AND BUILDING NEWS, 1943 July 2, pp. 11-12 :
The inner zone of London : paper by R. Atkinson [F.]. Historical description of growth from about 1830.
- ARCHITECT AND BUILDING NEWS, 1943 July 9, pp. 24-5 :
Bradford—Address by C. Williams-Ellis, at Town and Country Planning Association Conference at Bradford, on Bradford planning needs and opportunities.
- WERK (Zürich), 1943 May, p. xxvi :
Marsilles plan : note on work by Beaudouin, now Professor of Architecture at Geneva High School.
- ARCHITECTS' JOURNAL, 1943 July 29, pp. 66-82 :
Hull : detailed report of the Hull civic survey undertaken by Max Lock [A.] and team of architects and students. The first survey and mapping on large scale of all aspects of large British city : geography, industry, administration, land utilisation, transport, utilities, housing, commerce, social services. Also speech by Minister of Town and Country Planning at opening of Housing Centre Exhibition and paper by Lock.
- BUILDING, 1943 June, pp. 142-4 :
Replanning congested areas : designs by J. Schreiner, promoted by Cadbury in association with T. & C.P. Association. Includes flatted factories, housing.
- COUNTRY LIFE, 1943 June 18, pp. 1104-5 :
"Reconstruction : what can be done now," by Norman Tiptaft, ex-Lord Mayor of Birmingham. Illustrated by Birmingham Housing.
- COUNTRY LIFE, 1943 May 14, pp. 878-9 :
London Plans Revised. Article on the revised Royal Academy plan, illustrated by designs for St. Paul's approaches, Westminster Abbey surroundings and Grays Inn. Designs also illus. in NATIONAL BUILDER, May.
- [Material on the County of London and Greater London is under Regional Planning, ante.]
- BUILDER, 1943 June 11, pp. 514 :
Southampton : proposed flats and shopping circus in connection with planning scheme by Prof. Adshead and H. T. Cook.
- PENCIL POINTS (N.Y.), 1942 Sept., pp. 32-41 :
"Are planners prepared to rebuild our cities?" Answers by nine distinguished U.S. planners to questions posed by Prof. Killam, of Harvard, in article in June issue, "representing the point of view of hard-headed conservatism."
- COUNTRY LIFE, 1943 May 14, pp. 876-7 :
The Village as it might be ; article by Lucille Sayers, Devon County Magistrate, on social life and organisation.
- PENCIL POINTS (N.Y.), 1942 Sept., pp. 49-58 :
An industrial city : a plan by students of Washington University, St. Louis, to be compared with the A.A. project for a city in Berkshire. Includes designs for housing, parks, playgrounds, schools and recreation centre.
- AMERICAN CITY, 1943 April, pp. 57-9 :
Green-belts, traffic efficiency and quietness of living in urban areas extracts from book by Eliel Saarinen, The City—its growth, its decay, its future.
- BUILDER, 1943 May 14, p. 429 :
Guildford, Surrey, City Centre ; proposal by J. E. M. Macgregor [F.], for replanning.
- TECHNOLOGY REVIEW (Mass. Inst. Tech.), 1943 May, pp. 368-70, 384-6 :
"Shall we ration overcrowding : dwelling space is packed not for congestion's sake but for convenience . . ." Article by Frederick J. Adams with statistical analysis of urban densities.
- INST. OF CIVIL DEFENCE JOURNAL, 1943 April, pp. 111-24 :
"Some town-planning lessons of the fire blitz," paper by Eric L. Bird [A.], who has had unrivalled opportunity to study war fire risks. Analysis, plan and structural development of typical urban block. Illus. plans. Discussion.
- JOURNAL OF THE R.I.B.A., 1943 May, pp. 151-4 :
Communications : paper by Sir Charles Bressey ; No. 3 in series at R.I.B.A. on Town and Country Planning. (Further reference.)
- BUILDER, 1943 July 2, p. 8 :
Road crossings. "Switchback" system, by E. Pollak and T. W. Kennedy [A.].
- NATIONAL BUILDER, 1943 July, p. 191 :
Traffic roundabouts design for Manchester, by Noel Hill [F.], City Architect. Multi-level traffic circuit and crossing, with large cruciform building on central area. (Based on scheme in earlier entry.)
- ARCHITECT AND BUILDING NEWS, 1943 July 23, pp. 60-1 :
Air transport for London : abstract of lecture by R. F. Lloyd Jones at L.R.R.C. Exhibition, National Gallery.
- JOURNAL OF THE R.I.B.A., 1943 June, pp. 181-4 :
Holiday use of countryside and coastline, by John Dower [A.]. Paper in series at R.I.B.A. on town and country planning.
- AMERICAN CITY, 1943 April, p. 71 :
Recreation in small communities. Article by J. Roy Leevy, Purdue Univ. : brief analysis of sponsorship and facilities in 62 places.

Notes

THE R.I.B.A. AND NATIONAL PLANNING

The following letter from the President was published in "The Times" of 17 September :

Sir,—I have read with great interest the letters by Mr. J. D. Trustram Eve, Sir Stephen Tallents, and others, on the question of planning, and I think it would be helpful to state that a central advisory committee on national planning has been set up by the Royal Institute of British Architects. This committee has organized its allied societies throughout the country to enable architects to prepare a co-ordinated national plan. It is also intended to bring together the important research work which has been undertaken both by industry and independent societies, and the help of all these bodies is solicited.

The recent exhibition at the National Gallery on "Greater London" by the R.I.B.A. was a proof of the architects' contribution to the planning of the London Region, and it is hoped their work on the national plan will be received with the same enthusiasm. It is intended that this work should be a guide to those planning the more detailed areas throughout the country.

I am, Sir, yours faithfully,

PERCY THOMAS, President, R.I.B.A.

66, Portland Place, W.1.

WAR DAMAGE PROFESSIONAL FEES

The War Damage Commission announces an addition to the official notice of March 2, 1942, which set out the scale of professional fees for acting in an advisory capacity in connection with the execution of works which are allowed by the Commission in claims for cost of works or temporary works.

Consideration has been given to the appropriate fee to be paid in those cases where working drawings and/or specifications have been prepared, but there has been no supervision or certification of accounts by the professional adviser, either because the client did not require him to perform these latter services or because some part (or the whole) of the work for which the drawings and/or specifications were prepared has had to be abandoned, e.g., owing to further war damage, or requisition, or compulsory purchase of the property.

After consultation with, and with the concurrence of, the professional Associations concerned, the Commission has decided that the fee to be allowed should be calculated as follows :

- | | |
|---|--|
| (a) Where no supervision or certification is given | Two-thirds of the fee under Scale 2 (a) or 2 (b) as the case may be. |
| (b) Where all the appropriate services are rendered but part of the work is abandoned | Full-scale fee on the work done and two-thirds of the scale fee on the work abandoned. |

The only limitation is that where two professional advisers render the full services between them, the aggregate fees paid will not normally exceed a single full fee on the prescribed scale.

THE ASSESSMENT OF "PROPER COST" IN WAR DAMAGE CLAIMS

Permission has been received for the publication in the JOURNAL of the following letter from the Secretary of the War Damage Commission:—

War Damage Commission,
Devonshire House,
Mayfair Place,
Piccadilly, W.1.

18 August, 1943.

DEAR MR. SPRAGG,

With reference to your letter of 4th August, enclosing a copy of a letter from Mr. —, our Assessors have certainly not been instructed that they must not divulge their assessment of "proper cost" in any enquiry before a Deputy Commissioner. Nor, of course, are they precluded from explaining, in any discussion about a disputed claim, with the claimant's agent, the grounds on which they have arrived at their assessment; otherwise the negotiations, which are commonly undertaken, could not take place.

Our technical staff has been instructed that since the Commission has not laid down any fixed scale of charges to be regarded as "reasonable," irrespective of circumstances, and as the Commission's yardstick is only a general guide for the information of the technical staff, nothing is to be said in correspondence with claimants to suggest that the assessment of proper cost is based on a fixed standard prescribed by the Commission.

Yours sincerely,
W. R. FRASER.

C. D. Spragg, Esq.,
Royal Institute of British Architects.

COMPETITION FOR A PAIR OF COTTAGES

PROMOTED BY THE WOMEN'S INSTITUTES OF NORTH-AMPTONSHIRE

Assessor: MR. DARCY BRADDELL [F.]

Premiums: 1st 75 guineas.
2nd 50 guineas.
3rd 30 guineas.

Sending-in Day: 31 January, 1944

Intending competitors should write for a copy of the full conditions, marking their letters "Housing Competition," to THE HON. MRS. MACDONALD-BUCHANAN, Cottesbrooke Hall, Northampton.

The object of the competition is to secure a suitable design for a pair of family cottages for rural workers, where the prevailing standards of comfort, space, and seamliness, which have hitherto been accepted as adequate for their purpose, shall be sensibly, but in no way extravagantly, raised.

The Northamptonshire Women's Institutes propose to do all in their power to see that the standards so set by the results of this competition, both for appearance, quality of structure, convenience and size, shall be the standards accepted for the future rural housing of the County.

Great importance is attached to a sympathetic and realistic study of the conditions of family life in a country working man's home, and of the unnecessary burdens which that family, particularly the mother, is frequently faced to bear in the course of a normal day. Studies and surveys have been made. Yet, in the opinion of the promoters, the average cottage built of recent years shows little evidence that these studies have been put to practical use.

Accommodation is not to exceed a total floor area of 1,000 superficial feet, exclusive of any necessary one-storey outbuildings. It is to be suited to a family consisting of a married couple with four children.

No notice is to be taken of the present shortage of building materials, but they can be assumed to be all available in the normal manner. Competitors are free to design in whatever materials they please, providing that they are in harmony with the rural background of a village and take notice of the building facilities of the County.

The site, being purely imaginary, can be taken as level. These cottage are to be assumed to be set back thirty feet from a secondary public road running East and West through a village.

Drawings required are limited to two sheets in all. One to show plans and not less than one section, all to a scale of half an inch to a foot. The second sheet is to show the elevations to a scale of an eighth of an inch to the foot, and is to include on it a small perspective sketch.

R.I.B.A. EXAMINATIONS

The Final Examination, July 1943

The Final Examination was held in London and Edinburgh from the 7 to 15 July 1943.

Of the 65 candidates examined, 27 passed as follows:—

Passed whole examination	13
Passed whole examination, subject to approval of Thesis	6
Passed whole examination, subject to approval of Thesis and remaining Testimony of Study	1
Passed Part 1 only	4
Passed Part 1 only, subject to approval of remaining Testimonies of Study	2
Passed Part 2 only, subject to approval of Thesis	1
	27

38 candidates were relegated.

The successful candidates are as follows:—

Cadwallader, John D.; *†Cook, Laurence A. L.; Cresswell, Donald R.; Eden, A. Maurice; Forrest, Frank (*Distinction in Thesis*); Harper, William S.; *Hayman, George A. C.; *Holderness, N. Ross; Jarrett, Maurice C. (*Distinction in Thesis*); Jones, Herbert; *Knott, Ronald F.; *Lindars, Leslie W.; Mitchell, John; *Morris, William; Owen, Stanley G.; *Pearce, George A. H.; Smith, R. S. Wilson; Smyth, W. Granville; Trigg, Geoffrey H. (*Distinction in Thesis*); Weed, Charles H.

* Subject to approval of Thesis.

† Subject to approval of remaining Testimony or Testimonies of Study.

Part 1 only

Flint, John B.; Hepworth, A. Jackson; Julius, George L.; Lawson, Theodore F.; †Walters, William J.; †Worthington, Clifford.

Part 2 only

Kerr, Frederick H. (*subject to approval of Thesis*).

The Special Final Examination, July 1943

The Special Final Examination was held in London and Edinburgh from the 7 to 14 July 1943.

Of the 34 candidates examined, 15 passed (3 of whom sat for and passed in Part 1 only) and 19 were relegated.

The successful candidates are as follows:—

Booth, Raymond R.; Davey, William G. H.; Docherty, James; Hammond, Horace G.; Kirkpatrick, Geoffrey; Law, Charles; Pearce, A. Roger; Penrose, G. Richard; Pogany, Denes; Sidwell, J. Roland; Skelton, Leslie G.; Turner, Ronald J.

Part 1 only

Khachadourian, L. Y. M.; McArtney, John W.; Thompson, A. Roy.

The Examination in Professional Practice for Students of Schools of Architecture Recognised for Exemption from the R.I.B.A. Final Examination

The Examination was held in London and Edinburgh on the 13 and 15 July 1943. Of the 9 candidates examined, 8 passed and 1 was relegated.

The successful candidates are as follows:—

Baird, David L.; Caro (Miss) Rachel A.; Chandler, H. Brian; Eastwick-Field (Mrs.) E.; Evershed, Dudley G.; Hyland (Miss) Joan L.; Junge, Helmut; Paynter (Miss) Rachel M.

Examination of Licentiate to Qualify for Candidature As Fellows

The Examination of Licentiate to qualify for Candidature as Fellows was held in London from the 7 to 12 July 1943. Of the 7 candidates examined, 5 passed and 2 were relegated. The successful candidates are as follows:—

Adie, George M.; Ashby, Leslie J.; Edwards, Clifton; Fifield, Cyril; Newton, Ernest A.

DATES OF THE FORTHCOMING R.I.B.A. EXAMINATIONS

Intermediate Examination

November 12th, 13th, 15th, 16th, and 18th, 1943

(Last day for receiving applications: October 1st, 1943).

May 19th, 20th, 22nd, 23rd and 25th, 1944

(Last day for receiving applications: March 31st, 1944).

November 10th, 11th, 13th, 14th and 16th, 1944

(Last day for receiving applications: September 30th, 1944).

Final Examination

December 8th, 9th, 10th, 11th, 13th, 14th and 16th, 1943

(Last day for receiving applications: November 1st, 1943)

July 5th, 6th, 7th, 8th, 10th, 11th and 13th, 1944

(Last day for receiving applications: May 31st, 1944).

December 6th, 7th, 8th, 9th, 11th, 12th and 14th, 1944

(Last day for receiving applications: October 30th, 1944).

Special Final Examination

December 8th, 9th, 10th, 11th, 13th, 14th and 15th, 1943

(Last day for receiving applications: November 1st, 1943).

July 5th, 6th, 7th, 8th, 10th, 11th and 12th, 1944

(Last day for receiving applications: May 31st, 1944).

December 6th, 7th, 8th, 9th, 11th, 12th and 13th, 1944

(Last day for receiving applications: October 30th, 1944).

Examination for Building Surveyors

May 3rd, 4th and 5th, 1944

(Last day for receiving applications: March 21st, 1944).

**PROBATIONERSHIP R.I.B.A.
REGULATIONS FOR ENROLMENT**

With reference to the note published in the July number, it should have been made clear that only candidates who commenced their architectural careers before June 30, 1943, are now eligible to make special applications for enrolment as Probationer.

MINISTRY OF LABOUR CENTRAL (TECHNICAL AND SCIENTIFIC) REGISTER

A letter from Mr. R. Berg of the Ministry of Labour was published on p. 272 of the September JOURNAL omitting the Notice referred to in this letter. This is printed below:

NOTICE

The Ministry of Labour and National Service point out that Engineering Draughtsmen are urgently required. It is suggested by the Architecture and Public Utility Advisory Committee of the Central (Technical and Scientific) Register, after consultation with the Ministry, that architects not liable for military service who are not fully employed in a professional capacity at the present time could perform valuable war service by volunteering for training for employment as Mechanical Engineering Draughtsmen in the Ministry's own Government Training Centres or with a local employer.

The Training Centres are at Birmingham, Bristol, Croydon, Glasgow, Leeds, Leicester, Liverpool, London (Edmonton and Park Royal), Manchester, Newport, Slough, Southampton, Wallsend-on-Tyne, Watford.

For further particulars and information write to: The Central (Technical and Scientific) Register, Alexandra House, Kingsway, London, W.C.2.

Obituary

MR. JAMES ROBERTSON ADAMSON [F.]

The death of Mr. James Robertson Adamson [F.] was briefly recorded in the September issue of the JOURNAL. Mr. Adamson, who died on 9 September, was a partner in the firm of Messrs. Bradshaw Gass & Hope of Bolton. His education was at Galashiels High School and George Watson's College, Edinburgh, from where he passed in 1901 to serve his articles with Sir John Burnet in his Glasgow office and to study in the Glasgow School of Art and the Royal Technical College.

Between 1910 and 1913 he was chief assistant to Messrs. Graham & Hill, Newcastle-upon-Tyne, and in 1913 moved to Bolton as chief assistant to Messrs. Bradshaw Gass & Hope, whom he joined as partner in 1920.

Among the principal works for which his firm was responsible are the following:—Stretford, Lancs, Municipal Offices; Leith Town Hall and Library, Padiham Town Hall, Lancs; General Hospitals

at Church Village, Glamorgan, and at Chorley, Lancs; extensions to the Bolton Royal Infirmary; Congregational churches at Rhos-on-Sea, N. Wales at Moss Side, Withington and Alkrington.

During the war his firm has been engaged on many schemes for Government Departments.

Mr. Adamson took a prominent part in R.I.B.A. and Allied Society affairs and was President of the Manchester Society of Architects, 1933-5, and Vice-President of the R.I.B.A., 1937-9. He was also a member of the R.I.B.A. Council for many years and Chairman of the Allied Societies' Conference, 1937-9. He was a member of the Manchester Civic Advisory Committee.

HENRY JOHN CHETWOOD [F.]

Mr. Chetwood died suddenly, in his fifty-ninth year, on 10 September. On leaving Felsted School (to which he was always greatly attached) he was articled to A. W. S. Cross. The nature of Mr. Cross's practice gave him a specialised knowledge and skill in school-planning, one of the first fruits of which was the winning in 1912 (jointly with me), of a limited competition for a new elementary school at Lowestoft. An addition to Great Parnden Church, Harlow, Essex, was designed by him during the same pre-war period of his architectural career. In 1914 he joined the Artists' Rifles, went to France with them and rose to the rank of Captain R.T.O.

During the uneasy years of peace he designed some first-rate council houses, as well as the War Memorial, at Bishop's Stortford, but his most important work was done for his old school, in collaboration with his friend and contemporary there, Mr. T. F. W. Grant, M.C., F.R.I.B.A. The new Felsted buildings, for which they were jointly responsible, were the War Memorial Buildings, the Grignon Hall, the new Sanatorium, a new Science block, and the reconditioning of the Old School, carried out with the sympathy to be expected of architects who were both members of the Committee of the S.P.A.B.

Their new buildings were well planned, appropriate, good to look upon and entirely successful in every way. Henry Chetwood had been a member of the Art-Workers' Guild since 1924. He was a delightful personality, with a happy and humorous way of gaining affection. He was doing invaluable work for the War Damage Commission, with marked ability and tact, to within two days of his end, and died in harness as he wished.

BASIL OLIVER.

MR. B. BRENTFORD [F.]

We regret to record the death of Mr. B. Brentford [F.], of Lahore, India, who died of heart failure on 5 June 1943, at Kasauli (Simla Hills).

He was responsible for the designing of the various Government and private buildings, business premises and houses in Lahore, Amritsar, Ferozepur, Abbotabad, Peshawar, Frontier Provinces, Hamira (Kapurthala State), and other big stations like Delhi, Kasauli, Jaipur, etc.

He was consulting architect to the Lahore Cathedral Church Properties, The Tuberculosis Association of India, P.O.W. Camps, Jaipur, under the G.S.I.(J), P.W.E., The Punjab Government and the United Provinces Government. He designed a number of charitable institutions, such as Mosque in Model Town, American-Presbyterian Hospital at Sialkot, R. B. Gujar Mal Kesra Devi Tuberculosis Sanatorium at Amritsar, Lady Linlithgow Tuberculosis Sanatorium at Kasauli (Simla Hills), etc., etc.

Membership Lists

ELECTION: NOVEMBER 1943

An election of candidates for membership will take place in November, 1943. The names and addresses of the candidates, with the names of their proposers, found by the Council to be eligible and qualified in accordance with the Charter and Byelaws are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Saturday, 13 November, 1943.

The names following the applicant's address are those of his proposers.

AS FELLOWS (14)

BORRETT: MAJOR ALBERT REGINALD [A. 1933], 52 High Street, Windsor; 22 Mackenzie Street, Slough; 11 Abbey Street, Chester. G. H. Williams, J. H. Sayner and Herbert Spink.

CHAMBERLAIN: THOMAS LEWIS JOHN [A. 1938], 154 Friar Street, Reading; Kneller Way, 18 Cressingham Road, Reading. E. S. Smith, J. T. Saunders and A. B. West.

DAY: BENJAMIN IVOR [A. 1934], Halifax House, 1/2 St. Augustine's Parade, Bristol; Blagdon, Somerset. J. N. Meredith, F. E. Whiting and H. T. Seward.

- GREENIDGE : JOHN THEODORE WATERMAN [A. 1925], Bank Chambers, 13 High Street, Kettering. Prof. A. E. Richardson, A. T. Edwards and Charles Riddey.
- MATTHEWS : HAROLD EWART [A. 1914], County Architect, Dorset County Council, Shire Hall, Dorchester, Dorset : 17 Carlton Road South, Weymouth. C. G. Stillman, J. H. Haughan and C. W. Pike.
- RIDLEY : GEOFFREY WILLIAM, O.B.E., J.P. [A. 1914], 9 Minster Yard, York : 52 Hobgate, York. H. E. Mathews, O. D. Pearce and L. K. Hett.
- SQUIRE : RAGLAN HUGH ANSTRUTHER [A. 1938], 81 Piccadilly, W.1 : 18 Rossetti House, 106 Hallam Street, W.1. Darcy Braddell, Howard Robertson and W. R. Davidge.
- URWIN : SAMUEL ERNEST [A. 1927], County Architect, Shire Hall, Gloucester : 42 Cambray Court, Cheltenham. J. Macgregor, J. H. Haughan and C. G. Stillman.
- WATSON : JOHN, Dip. Arch., Glas. [A. 1926], 111 Union Street, Glasgow, C.1 : Old Mains, Cadzow Avenue, Giffnock, Renfrewshire. W. J. Smith, John Stewart and A. G. Henderson.
- And the following Licentiates who have passed the qualifying Examination :
- ADIE : GEORGE MOUNTFORD, 49 Ickenham Road, Ruislip, Middlesex : Weylands, Farnham Royal, Bucks. C. A. Lucas, F. C. Butten and C. W. Box.
- ASHBY : LESLIE JOHN, Oxfordshire County Council, 3 Becket Street, Oxford : 127 Eynsham Road, Oxford. Applying for nomination by the Council under Bye-law 3 (d).
- EDWARDS : CLIFTON, 3 Brook Street, Stoke-on-Trent. E. T. Watkin, A. R. Scriver and J. B. Adams.
- FIFIELD : CYRIL, A.M.T.P.I., P.A.S.I., County Architect's Department, Shire Hall, Dorchester, Dorset : "Cross Roads," 57 South Court Avenue, Dorchester. T. R. Clemence, J. N. Meredith and C. W. Box.
- NEWTON : ERNEST ALBERT, Rutherford Chambers, Bow Lane, Manchester : Willows, Moss Lane, Timperley, Cheshire. Prof. L. B. Budden, Prof. R. A. Cordingley and Francis Jones.

AS ASSOCIATES (31)

- The name of a school, or schools, after a candidate's name indicates the passing of a recognised course.
- ALPORT : PETER GREENWOOD [The Technical College, Cardiff], "Broad Eaves," Langstone, Newport, Mon. T. A. Lloyd, Harry Teather and C. F. Bates.
- BOLLAND : FRANCIS SENIOR [Victoria Univ., Manchester], 2 Broadway, Cheshire, Cheshire. Prof. R. A. Cordingley, F. L. Halliday and J. P. Nunn.
- BROADBENT : JOHN DESMOND [Architectural Association], 16 Wolseley Road, N.8. Fredk. Gibberd, George Fairweather and G. A. Jellicoe.
- BYRAM : DAVID RADCLIFFE [Victoria Univ., Manchester], 136 High Street, Uppermill, N. Oldham. Prof. R. A. Cordingley, F. L. Halliday and J. P. Nunn.
- CATON : KENNETH JAMES [Leeds School of Architecture], 423 Otley Road, Adel, Leeds 6. G. H. Foggiatt and applying for nomination by the Council under Bye-law 3 (d).
- CHILDS : DERRICK RIGBY [Univ. of London], Endways, Hunton Bridge, Nr. Kings' Langley, Herts. Prof. A. E. Richardson, H. O. Corfiato and L. S. Stanley.
- GRESSWELL : DONALD RANDAL [Final], 20 Highgrove Avenue, Chilwell, Notts. W. A. Woodland, A. J. Thraves and T. C. Howitt.
- EDEN : ALBERT MAURICE [Final], 44 Bosworth Road, New Barnet, Herts. Paul Badcock, Alfred Forrester and L. S. Stanley.
- EVERSHED : DUDLEY GRAHAM [Univ. of London], 37 Clarence Road, St. Albans, Hertfordshire. Prof. A. E. Richardson, H. O. Corfiato and L. S. Stanley.
- GREENEN : FRANK ROWLAND [Univ. of London], "The Red Cottage," Shalford, Surrey. Prof. A. E. Richardson, H. O. Corfiato and L. S. Stanley.
- HURST : RONALD WALKER [Final], Tudor Cottage, Hangleton Road, Brighton. Applying for nomination by the Council under Bye-law 3 (d).
- HYLAND : MISS JOAN LUTZEN, B.Arch. [Univ. of London], 6 Leinster Gardens, W.2. Prof. A. E. Richardson, H. O. Corfiato and E. B. Glanfield.
- ISAACS : ADOLPH MENDEL, B.A. [Victoria Univ., Manchester], 136 Middleton Road, Higher Crumpsall, Manchester, 8. Prof. R. A. Cordingley, F. L. Halliday and Peter Cummings.
- JARRETT : MAURICE CHARLES [Final], 121 St. George's Road, Coventry. Rolf Hellberg, Herbert Jackson and W. S. Hattrell.
- JONES : HERBERT [Final], 21 Riverslea Road, Blundellsands, Liverpool

23. F. J. M. Ormrod, H. Banister and applying for nomination by the Council under Bye-law 3 (d).
- KIRKPATRICK : GEOFFREY [Special Final Exam.], 12 Fern Dale, Tunbridge Wells, Kent. Cecil Burns, Stanley Philpot and C. H. Strange.
- LAMBERT : RONALD [Final], 17 Holly Grove, Parkinson Lane, Halifax, Yorks. W. A. Ross, W. Illingworth and Eric Morley.
- LAW : CHARLES [Special Final Exam.], 6 Lincoln Avenue, Roberttown, Liversedge, Yorkshire. Harold Bowman, E. E. Morgan and Prof. R. A. Cordingley.
- LURIE : SAMUEL [Univ. of London], The White Hart Hotel, Amptill, Beds. Prof. A. E. Richardson, H. O. Corfiato and L. S. Stanley.
- NAUNTON : MISS MARGARET DOREEN [Victoria Univ., Manchester], 40 Pettrymead, Prestwich, Manchester. Prof. R. A. Cordingley, F. L. Halliday and J. P. Nunn.
- OWEN : STANLEY GEORGE [Final], 6a Springfield Road, Moseley, Birmingham 13. T. M. Ashford, Reginald Edmonds and Herbert Jackson.
- PALMER : WALTER GEORGE [The Polytechnic, Regent Street, London], 285 Waldegrave Road, Twickenham, Middlesex. Joseph Addison, J. K. Hicks and E. C. Scherrer.
- PARTINGTON : JAMES ERNEST [Victoria Univ., Manchester], 22a Sapling Road, Bolton. Prof. R. A. Cordingley, F. L. Halliday and J. P. Nunn.
- PEARCE : ARTHUR ROGER [Special Final Exam.], 78 Woodbridge Road East, Ipswich, Suffolk. J. W. Wilson, J. A. Sherman and applying for nomination by the Council under Bye-law 3 (d).
- PENROSE : GEORGE RICHARD [Special Final Exam.], St. Mary's House, Ormond Avenue, Hampton, Middlesex. C. W. Box, B. W. H. Scott and L. H. Bucknell.
- ROBINSON : HENRY ADRIAN [Univ. of Liverpool], St. Catherine's, Craigavad, N. Ireland. Prof. L. B. Budden, W. R. Davidge and T. R. Eagar.
- SIDWELL : JOHN ROLAND [Special Final Exam.], 124 Wilson's Lane, Longford, Coventry. G. B. Bridgman, A. C. Bunch and W. S. Hattrell.
- SINGER : THOMAS STANLEY [Final], "Chesney," 230 Myton Road, Warwick. A. C. Bunch, C. F. Martin and F. G. Cundall.
- SKELTON : LESLIE GEORGE [Special Final Exam.], 61 Hythe Road, Thornton Heath, Surrey. Norman Keep, C. W. Smith and Michael Tapper.
- SMYTH : WILLIAM GRANVILLE [Final], Ardville, Marino, Belfast, Co. Down. R. H. Gibson, J. R. Young and R. S. Wilshe.
- TURNER : RONALD JAMES [Special Final Exam.], 208 Western Road, Leigh-on-Sea, Essex. Paul Badcock, R. E. Enthoven and A. F. C. Bentley.

AS LICENTIATES (17)

- ALLOTT : ARTHUR BENNETT, 20 Moorgate Street, Rotherham : 32 Munsbrough Lane, Greasbrough, Rotherham. D. B. Jenkinson, H. B. S. Gibbs and Frank Richardson.
- BATELY : IRVINE, J.P., Urban District Council Offices, Station Road, Portslade, Sussex : 12 Vale Road, Portslade, Sussex. John L. Denman and the President and Hon. Secretary of the S.E.S.A. under Bye-law 3 (a).
- BROWN : VIVIAN HENRY ALLPORT, Borough Surveyor's Office, Borough Hall, Stafford : 7a Baswich Lane, Stafford. Applying for nomination by the Council under Bye-law 3 (d).
- EDWARDS : DAVID MERVYN, Estate Department, Great Western Railway Co., Wolverhampton : 15 Knights Crescent, Tettenhall, Wolverhampton. Applying for nomination by the Council under Bye-law 3 (d).
- FORD : RONALD WILLIAM, 51a Lincoln's Inn Fields, W.C.2 : 22 Clock House Road, Beckenham, Kent. F. W. Charity and applying for nomination by the Council under Bye-law 3 (d).
- HAND : JOHN CHARLES, City Architectural Department, Kingsway, Stoke-on-Trent : 37 Lower Oxford Road, Basford Park, Newcastle, Staffs. J. B. Adams, E. T. Watkin and A. R. Scrivener.
- JONES : RUPERT, 11 Moorland Rise, Leeds 7. P. J. Munden, H. J. Lyons, Vincent Kelly and J. J. Robinson.
- PAGE : WILLIAM HARRY, Borough Engineer's Department, Wolverhampton : "Danehurst," Buckingham Road, Penn, Wolverhampton. Wallace Wood, A. T. Butler and W. T. Benslyn.
- PEGGUM : MAJOR WILLIAM AUBREY, 22 Lansdowne Court, Brighton Road, Purley, Surrey. A. L. Roberts and applying for nomination by the Council under Bye-law 3 (d).
- RAVEN : OSCAR BOULTBEE, Euston House, Eversholt Street, N.W.1 : Maytree Cottage, Shrivenham, Swindon, Wilts. A. E. Beswick, E. J. W. Hider and A. J. May.
- ROBINSON : WALTER, Messrs. W. W. Robinson & Son, 10 King Street,

Hereford; 59 Stanhope Street, Hereford. Applying for nomination by the Council under Bye-law 3 (d).

RUSSELL: ARTHUR HENRY, Town Hall, Spa Road, Bermondsey, S.E.16; 60 Ingleboro Drive, Purley, Surrey. C. J. Burnett, Sydney Tatchell and H. J. Higgs.

SCOTT: FRANCIS CLUNIE, Housing Department, Glasgow Corporation, 20 Trongate, Glasgow; 3 Moor Road, Milngavie. Jos. Weekes and the President and Secretary of the Glasgow Institute of Architects under Bye-law 3 (a).

SHEARER: JAMES, 11 Maygate, Dunfermline, Fife; Morton Lodge, Transy, Dunfermline. C. G. Soutar, John Wilson and J. R. McKay.

TAYLOR: MISS GERTRUDE MOLLY JUSTICE, 4 and 5 Bridge Street, Bath; 2 Forester Road, Bath, Somerset. A. C. Fare, E. H. Button and C. F. W. Denning.

TRANTOM: HAROLD JAMES, B.15, 10 Dale Street, Liverpool 2; 105 Queen's Drive, Walton, Liverpool 4. W. P. Horsburgh, A. E. Shennan and F. C. Saxon.

WHATLEY: ALFRED GEORGE, War Damage Commission; 10 Church Hill Road, E.17. Applying for nomination by the Council under Bye-law 3 (d).

ELECTION: FEBRUARY 1944

An election of candidates for membership will take place in February, 1944. The names and addresses of the overseas candidates, with the names of their proposers, are herewith published for the information of members. Notice of any objection or any other communication respecting them must be sent to the Secretary R.I.B.A. not later than Monday, 24 January, 1944.

The names following the applicant's address are those of his proposers.

AS ASSOCIATES (7)

The name of a school, or schools, after a candidate's name indicates the passing of a recognised course.

EFROIKEN: MORRIS, Dip.Arch. [Capetown] (Passed a qualifying Exam. approved by the Institute of South African Architects), Wherry House, Wherry Road, Muizenberg, Capetown, S. Africa. Prof. L. W. T. White, F. K. Kendall and H. J. Brownlee.

LYTH: JOHN BURDSALL [Univ. College, Auckland, New Zealand], c/o Hydro Electric Branch, P. W. D., Wellington, C.1, New Zealand. Eric Miller, J. H. White and J. W. Mawson.

MACGOWN: ROBERT GEORGE MAXWELL, B.Arch. [Univ. College, Auckland, New Zealand], 35 Bolton Street, Wellington, New Zealand. W. G. Young, J. W. Mawson and W. M. Page.

MATHEW: HUGH PAWLEY, B.Arch. [Rand.] (Passed a qualifying Exam. approved by the Institute of South African Architects), 58 Minors Street, Yeville, Johannesburg. D. M. Sinclair, A. J. Marshall and D. M. Burton.

MEE: HAROLD HENRY MASSEY (Passed a qualifying Exam. approved by the Royal Australian Institute of Architects), 7 Flat, 623 Anzac Parade, Maroubra, N.S.W., Australia. B. J. Waterhouse, Prof. A. S. Hook and applying for nomination by the Council under Bye-law 3 (d).

PRICE: HERBERT ERNEST MEREDITH (Passed a qualifying Exam. approved by the Institute of South African Architects), c/o H. H. Price, Esq., "Ellerslie," P. O. Umtali, S. Rhodesia. Prof. L. W. T. White, F. K. Kendall and John Perry.

TAVENER: FELIX WILLIAM (Passed a qualifying Exam. approved by the Royal Australian Institute of Architects), 19 Buckingham Road, Killara, New South Wales, Australia. C. C. Ruwald, J. C. Fowell and W. R. Richardson.

ELECTION: SEPTEMBER 1943

The following candidates for membership were elected in September, 1943.

AS FELLOWS (11)

ALDRED: DOUGLAS WINSTON, P.A.S.I. [A. 1932].

ALEXANDER: ANDREW GORDON [A. 1929].

ANDERSON: ALEXANDER ROBERT FORDYCE [A. 1932].

ASHBURNER: EDWARD HEATHCOTT, B.Arch. [A. 1925], Lancaster.

BRAMWELL: JAMES STONEMAN [A. 1921], Nottingham.

HOLLAND: HARRY [A. 1920].

JADHAV: MAHADEO KRISHNAJI [A. 1937], Baroda.

JONES: CHARLES FREDERICK [A. 1919], Cardiff.

McMORRAN: DONALD HANKS [A. 1931].

SIMMS: HERBERT GEORGE (R.I.B.A. Dipl. Town Planning), M.T.P.I. [A. 1923], Dublin.

THOMPSON: JAMES OSBERT [A.] 1915, Leicester.

AS ASSOCIATES (9)

BARRY-WALSH: BRENDAN, Belfast.

BOWMAN: ALEXANDER WILLIAM, Christchurch, New Zealand.

CAMPBELL: RUPERT CHAMBER.

DARLOW: HENRY ARTHUR JACK.

DOBSON: MISS JOSEPHINE DOROTHY ANN, B.Arch. (Rand.), Johannesburg.

HALBRITTER: SIDNEY CONSTANTIN, Ebbw Vale.

HANLY: DAVID PATRICK, B.Arch.(N.U.I.), Dublin.

O'DEA: LIEUT. JOHN BAPTIST, B.Arch., Kilkenny.

SCALLY: PATRICK JOSEPH, B.Arch.(N.U.I.), Dublin.

AS LICENTIATES (35)

ALGER: HENRY WILLIAM, Hythe.

ANDERSON: JAMES, Tunbridge Wells.

BOOTHMAN: FRANK, Aylesbury.

BOWKER: RICHARD ENOCH, Warwick.

CAKE: RONALD HENRY, Ipswich.

CLARKE: JOHN, Burslem.

CLAYTON: HARRY, Malvern.

COLLINS: ARTHUR REGINALD GEORGE, Reading.

CROWTHER: JOSEPH HAWKYARD, Brighouse.

DUNHAM: HEDLEY THEODORE, Norwich.

EDWARDS: HENRY NORMAN, Cardiff.

ELLIS: LEONARD ERNEST, Exmouth.

FUNNELL: WILLIAM ARTHUR.

GILBERT: HENRY BRYAN.

HILDITCH: JOSEPH, Prescot.

HOLDER: HERBERT WILLIAM, Bristol.

HOLT: ROBERT CHARLES, Runcorn.

HUTCHINSON: HOWARD BRUCE.

KAIN: WILFRID CHARLES.

KINNEAR: ALEXANDER STEWART, Edinburgh.

LEED: JOHN ERIC RIDDLE, Oxford.

LLOYD: FFRANCCON, Mold.

MARSH: CHARLES ERIC WILSON, Douglas, Isle of Man.

MAY: PERCY JOHN, Cardiff.

MEDHURST: HENRY THOMAS.

MULTON: LEONARD JAMES, Dudley.

NEWTON-SMITH: JAMES.

OSBOURNE: HARRY ARCHIBALD, Doncaster.

RADFORD: FREDERICK JAMES.

RODGER: STANLEY EVELYN.

ROWE: FREDERICK WALTER, Worcester.

SCHOFIELD: HARRY, Nottingham.

SMITH: WILLIAM FARQUHARSON, Kinghorn.

STRINGER: GEORGE JAMES WILLIAM.

TATE: JOHN WHITE, Wigan.

Notices

ASSOCIATES AND THE FELLOWSHIP

Associates who are eligible and desirous of transferring to the Fellowship are reminded that if they wish to take advantage of the next available election they should send the necessary nomination forms to the Secretary R.I.B.A. as soon as possible.

THE USE OF TITLES BY MEMBERS OF THE ROYAL INSTITUTE

In view of the passing of the Architects Registration Act 1938, members whose names are on the Statutory Register are advised to make use simply of the title "Chartered Architect" after the R.I.B.A. affix. The description "Registered Architect" is no longer necessary.

MEMBERS' COLUMN

PRACTICES

ARCHITECTURAL PRACTICE in Leeds for sale, following death of late Principal. Goodwill and drawings only.—Apply Box 2193, R.I.B.A. JOURNAL.

ARCHITECTS AND SURVEYORS. Owing to death of Principal, opportunity occurs to acquire old-established Practice, Brighton.—Apply Box 1133, R.I.B.A. JOURNAL.

CHANGE OF ADDRESS

Messrs. Hadfield & Cawkwell [F.], have changed their address to: 279 Glossop Road, Sheffield, 10. Tel. no. 23394-5.

MR. KENNETH WARD [F.]

MR. KENNETH WARD [F.], of York, has been appointed Chairman of the Tribunal of Appeal, Joint Planning Board (North Riding of Yorkshire, No. 6 Area).



Norwich Cathedral

THE building of Norwich cathedral was begun in 1096 by Herbert de Losinga, upon whom this task was imposed by the Pope as a penance for an act of simony—the corrupt purchase of ecclesiastical preferment. It is said that he received a bishopric in return for a payment of £1,900 into the treasury of William Rufus. The fifteenth-century spire, built upon a Norman tower, is outrivalled in height only by Salisbury—that perfect example of Early English style—but yields nothing, even to this, in grace. Any achievement so completely satisfying and enduring is an encouragement to all human endeavour, and it is a source of pleasure to us that in the protection and restoration of many ancient buildings a valuable contribution has been made by the use of 'PUDLO' Brand cement waterproofer.

'PUDLO'

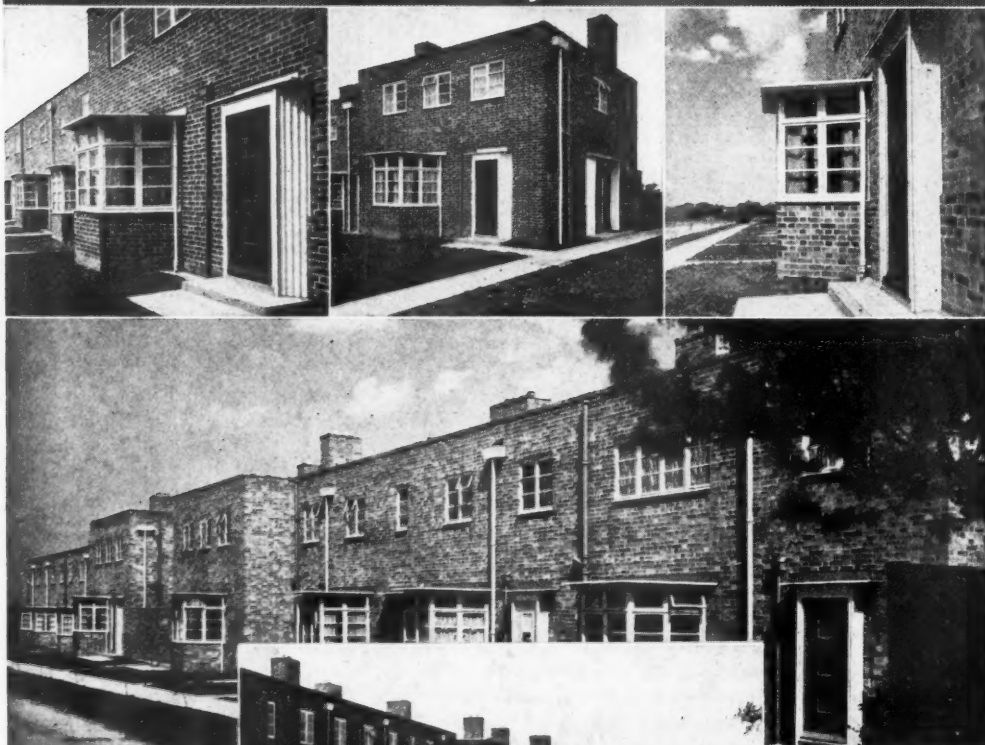
BRAND
CEMENT WATERPROOFER

It is tantalising, but inevitable, that so many of the interesting jobs in which 'PUDLO' Brand waterproofer is now being used must remain "unheralded and unsung" until after the war. In place of the illustrations that cannot be used, we are pleased to publish a series of drawings of East Anglian monuments; these drawings, in pen and wash, are the work of Leonard Squirrel, R.W.S., R.E., who, by the verdict of his fellow artists, is placed in the ranks of the foremost British landscape draughtsmen.

KERNER-GREENWOOD & COMPANY, LIMITED
AUSTIN STREET Sole Proprietors and Manufacturers KING'S LYNN

ASBESTOS-CEMENT

solves this problem



In this housing scheme for the Ministry of Supply, by Arthur W. Kenyon, F.R.I.B.A., skilful use has been made of Asbestos-cement products at a number of points.

These include — hoods and exterior trims to doorways, and bay-window and outhouse roofs. The Asbestos-cement products used are listed below.

The nations need for Housing

This is one of a series of advertisements designed to show how Asbestos-cement can help to solve an almost infinitely varied range of problems. At present, war-time needs have a monopoly of its service but when peace comes the manufacturers look forward to extending further its usefulness.

TAC

**TURNERS
ASBESTOS
CEMENT
CO. LTD.**

**TRAFFORD PARK
MANCHESTER 17**

TAC

"EVERITE" Asbestos-cement Rainwater Goods and Fittings

"EVERITE" Asbestos-cement Canopies for Doors and Windows.

"EVERITE" "BIGSIX" Asbestos-cement Corrugated Sheets.



PHORPRES BRICKS
The widespread National Distribution built up by London Brick Company Limited over a period of years is temporarily curtailed. After the war the Phorpres delivery service will be still more widespread and efficient.

From farmsteads such as these—overcrowded, lacking in amenity—farmers have achieved wonders in swelling the National Larder in War. The very least the Nation can determine in return is that the practicability of securing a reasonable standard of living shall be assured to them when Peace returns. For the rebuilding of farm houses and buildings there is nothing to equal brick and wherever in the British Isles the farm may be Phorpres bricks will once again be available for delivery.

L O N D O N B R I C K C O M P A N Y L I M I T E D

HEAD OFFICE : STEWARTBY, BEDFORD, BEDS.

Telephone : KEMPSTON 3131

BIRMINGHAM OFFICE : PRUDENTIAL BUILDINGS, ST. PHILIP'S PLACE, BIRMINGHAM, 3.

Phone : COLMORE 4141

BRISTOL DEPOT : ASHLEY HILL GOODS DEPOT (G.W.R.) ASHLEY HILL.

Phone : BRISTOL 46572



THE STRENGTH IS IN THE SECTION

SIEGWART

PRECAST FLOORS AND ROOFS



NO CENTERING REQUIRED

THE SIMPLICITY IS IN THE SYSTEM

SIEGWART FIREPROOF FLOOR COMPANY LIMITED
Croxley Green, Rickmansworth, Herts. Tel. : Rickmansworth 2268/9
Branches : BIRMINGHAM, LEICESTER, MANCHESTER, GLASGOW



HENLEY

Thermoplastic Cables

For many years the HENLEY Research Laboratories have conducted investigations into the possibilities of using Thermoplastic Compounds for electric cable insulation and sheathing. Since the War their efforts have been intensified because of the vital necessity of conserving rubber, and their resources have been concentrated on the practical development and application of reliable alternatives.

Considerable quantities of HENLEY Thermoplastic (P.V.C.) Cables have been supplied for special purposes, and types suitable for general trade requirements are now being introduced complying with Amendment No. 3, June 1943, to B.S. 7/1939.★

STOCKS OF THERMOPLASTIC (P.V.C.) CABLES, WIRES AND FLEXIBLE CORDS ARE NOW AVAILABLE AT OUR BRANCHES.

★ Polyvinyl Chloride (P.V.C.) Cables have been officially recognised as permissible alternatives to vulcanised rubber cables, both by Government Departments and by the British Standards Institution.

W. T. HENLEY'S TELEGRAPH WORKS CO. LTD.
MILTON COURT • WESTCOTT • DORKING • SURREY

PHONE DORKING 3241 (10 LINES)
TELEGRAMS HENLETEL, DORKING



In Fuel Efficiency Bulletin No. 12 (page 9) of the Ministry of Fuel and Power, Wood Wool Building Slabs are cited as saving 81 per cent., 80 per cent., and 55 per cent. of fuel when used respectively to insulate roofs of corrugated iron, asbestos or concrete constructions. Big savings, these, which must overshadow all other advantages of Wood Wool Building Slabs as long as war continues. But in peacetime insulation against sound, moisture and vermin will be considered just as necessary. Wood Wool Building Slabs meet all these insulating needs in a high degree. We have produced a technical booklet containing the latest available information about Wood Wool Building Slabs. To conform with Paper Control Regulations we have to ask a penny for it—but, we assure you, it is a good stampsworth.

WOOD WOOL BUILDING SLABS

Wood Wool Building Slab Manufacturers Association
21 St. James's Square, S.W.1



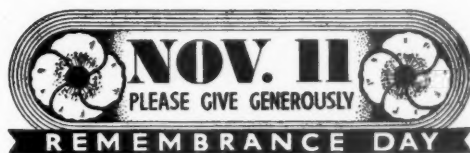
KITCHEN VENTILATION

When expenditure permits, a complete exhaust ventilation plant for removing kitchen fumes is advised. Through a system of well-designed double hoods, with drip gutters and ducting to a fan, fumes are conveyed to the atmosphere at roof level. We design, make and install the complete equipment.

Where rigid economy is necessary; in the kitchens of British Restaurants, Schools, Nurseries and Communal Centres, our District Engineers will gladly advise on the selection and location of Aircrew exhaust fans. Although less effective than the hood system, conditions will be greatly improved. One kitchen exhaust fan can be made to ventilate the dining-room also; by the introduction of a suitable air inlet between the two rooms. Blackout devices are fitted to these fans, as shown in our booklet F.102, which will be sent on request.

AIRCREW FAN SYSTEMS

THE AIRCREW COMPANY LTD.
GROSVENOR GARDENS HOUSE, WESTMINSTER, LONDON, S.W.1
Telephone: VICTORIA 4527 Telegrams: AIRCREW, SOWEST, LONDON

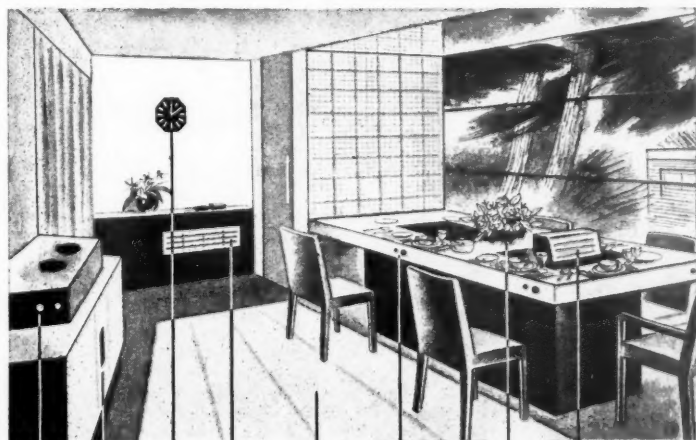


We commend the cause of the
BRITISH LEGION
 to the generosity of our friends

RIPPERS **RIPPER** WOODWORK LIMITED

CASTLE HEDINGHAM, ESSEX & 11, GROSVENOR COURT MANSIONS, MARBLE ARCH, W.2.

THE ALL ELECTRIC HOME OF THE FUTURE



- 1 Electric Cocktail Mixer
- 2 Electrically Cooled Cocktail Cabinet
- 3 SMITH SECTRIC CLOCK
- 4 Air Conditioning Radiant
- 5 Electric Panel Heated Carpet
- 6 Bell Push and Plug for Phone
- 7 Illuminated Flower Decoration and Table Lighting
- 8 Electric Hot Plate and Toaster Rising from Table

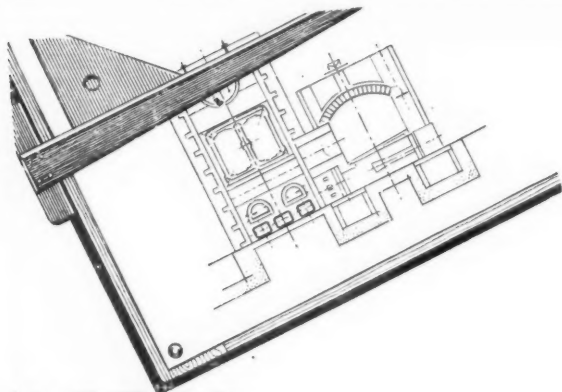
No. 2

THE DINING ROOM

This suggestion is respectfully submitted to our professional friends with the thought that they will find interest and usefulness in a constructive layman's vision of what should be provided in the post war era.



SMITH SECTRIC
 CLOCKS



ILFORD DOCUMENT PAPERS

*for the photographic
duplication of plans,
specifications and all other records.*

Ilford Limited manufacture a wide range of document papers which adequately cover every copying requirement in commercial and industrial organisations.

Ilford Document Papers are coated with a high speed, contrasty, orthochromatic emulsion which yields excellent negatives with intense blacks and clean white lines, and are available to suit every subject. These papers are supplied in cut sizes or in rolls to fit the standard document copying cameras.

Ilford Limited are always willing to give expert advice on all matters concerning the application of Photography to plan copying.

Ilford Document Paper is made in grades as under:—

ILFORD Document Paper No. 4

Recommended for ordinary commercial use — coated on standard grade paper which is fairly thick and strong. Highly orthochromatic.

ILFORD Document Paper No. 4T

Highly orthochromatic. Coated on a thin tough base for use when copies are required for mailing.

ILFORD Document Paper No. 1

Coated on a smooth, thin rag base. Highly orthochromatic. Recommended for making copies that have to remain in perfect condition over long periods.

ILFORD Ortho Photomechanical Paper

for copying intricate plans containing fine lines, giving cleaner and stronger reproductions.

ILFORD Photomechanical Paper

A slower paper coated with a non-ortho emulsion.

The Ilford booklet "Photography Applied to Plan Copying in Engineering and other Industries" describes several convenient processes applicable in every drawing office.

ILFORD LIMITED • ILFORD • LONDON

"Britain's Best Flush Door"

The
flush door
for the man who
"looks under
the bonnet"

LEADERFLUSH LTD.
TROWELL NOTTINGHAM

Cogent

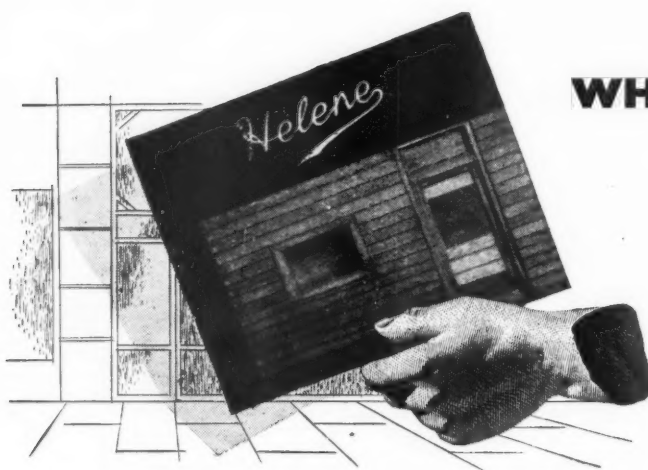


AIR CONDITIONING :: ELECTRICITY
SANITATION AND HEATING



MATTHEW HALL
& CO. LTD

26-28 · DORSET · SQUARE · LONDON · N.W.1
PADDINGTON · 3488 · 20 LINES
LONDON - GLASGOW - BIRMINGHAM - LIVERPOOL - BELFAST - BRISTOL - LEICESTER - CARDIFF



WHAT'S TO FOLLOW?

When the shops no longer need protection from splinters and blast, what sort of shops will be built? We know we shall have lots of new materials, new ways of lighting, and new ideas: and we shall be ready to put them to the service of architects who want well-built shops that work.

Harris & Sheldon Ltd MAKERS OF SHOPS

London Showrooms: 27 Berkeley Square, W.1. Telephone: Mayfair 2017.
Works and Head Office: Stafford Street, Birmingham, 4. Glasgow Office:
94 Miller Street. Manchester Office: Fernleaf Street, Moss Side.

for STEEL EQUIPMENT **Sankey-Sheldon**

TAYLOR WOODROW CONSTRUCTION LIMITED

BUILDING AND CIVIL ENGINEERING CONTRACTORS

London Office:

10, ST. GEORGE STREET, W.1

Also at

RUISLIP ROAD, SOUTHALL, MIDDLESEX

Telephone: WAXlow 2366 (10 lines)

Telegrams: "Taywood, Southall"

AND BRANCHES THROUGHOUT THE COUNTRY

RESTORATION

OF DECAYED OR DAMAGED STONEMWORK

PRESERVATION

OF STONE, BRICKWORK, RENDERING & STUCCO

STEAM CLEANING WORK

DREYFUS

Established . . . 1884

A. DREYFUS LTD., 117 GRANVILLE ROAD, LONDON, N.12.

Tel.: Fin. 5463

Protection

STEEL ROLLING ROLADOR SHUTTERS and FIROLA SHUTTERS protect Machines, Tools, Processes, Stores, Records, Personnel and Property. Where licenses are granted we can still manufacture and supply STEEL DOORS, IRONWORK, PORTCULLIS GRILLES AND BLACKOUT BLINDS.

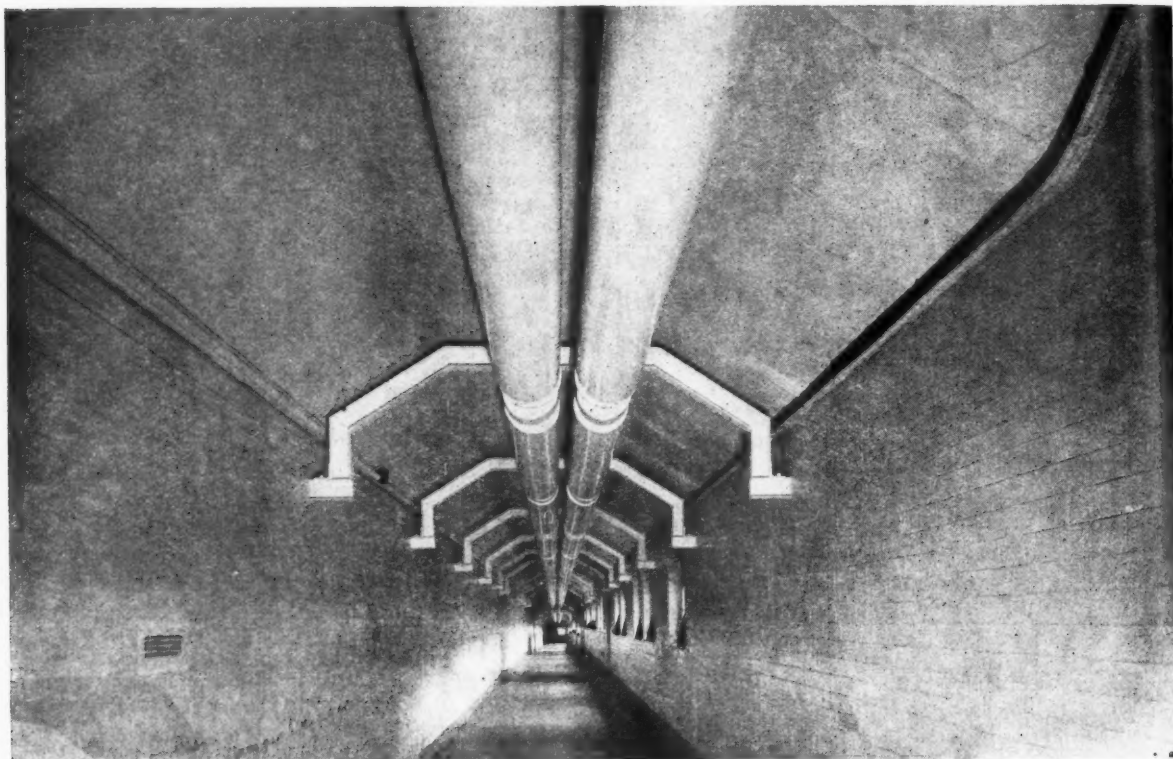
ENQUIRIES WILL BE WELCOMED

TELEPHONE : LARKSWOOD 2632. TELEGRAMS : SNIKSAH, 'Phone, LONDON. Established 1734.

Haskins WALTHAMSTOW LONDON E.17.

SERIES NO. 10

MODERN ENGINEERING INSTALLATIONS by HADENS



by courtesy of Kent County Council. W. E. Fretwell, Consulting Engineer.

GOOD craftsmanship in pipework. Heat distribution piping installed in the existing corridors of a large institution.

HEATING
BY ALL SYSTEMS
HIGH PRESSURE HOT WATER
SYSTEMS FOR HEATING AND PROCESS WORK
AIR CONDITIONING AND VENTILATION
PLUMBING & SANITATION, ELECTRIC LIGHTING & POWER



IN WAR TIME
A.R.P. VENTILATION
AND GAS FILTRATION
HOT WATER SUPPLIES
FOR CLEANSING STATIONS
PATENT DEINFESTING APPARATUS FOR CLOTHING, ETC.

G. N. HADEN & SONS LTD

☆☆ Estd. 1816

FULLY EQUIPPED BRANCHES AT:

Manchester 2, 4 Albert Square	Blackfriars 6355
Birmingham 3, 45 Great Charles Street	Central 8391
Glasgow C.2, 86 St. Vincent Street	Central 3106
Bristol 1, Orchard Street	Bristol 20285
Bournemouth, Avon Works, Avon Road	Boscombe 512
Torquay, Castle Road	Torquay 3831
Lincoln, Guildhall Street	Lincoln 993
Newcastle-on-Tyne, 13 Mosley Street	Newcastle-on-Tyne 26780

York, 39 Micklegate	York 4253
Aberdeen, 80-82 Upper Denburn	Aberdeen 391

Temporary Addresses:

Eastbourne 19-29 Woburn Place, London, W.C.1	Terminus 2877
Canterbury: 19-29 Woburn Place, London, W.C.1	Terminus 2877
Liverpool: 4 Albert Square, Manchester 2	Blackfriars 6356

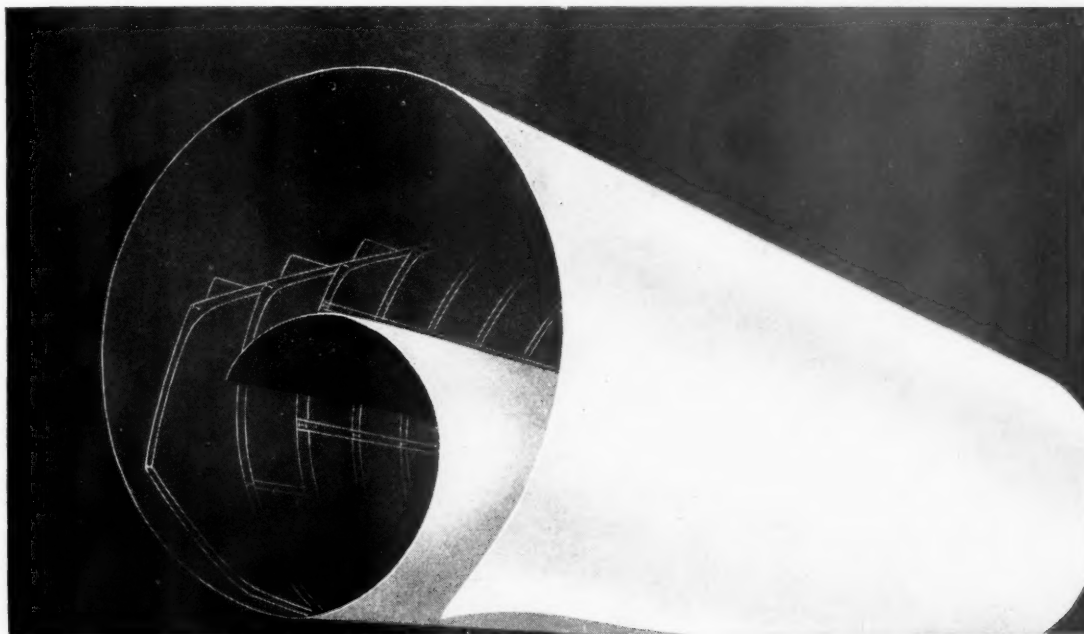
TROWBRIDGE

Trowbridge 723

Affiliated Company: HADENS ENGINEERING CO. LTD., 199 Pearse Street, Dublin, C.5 Dublin 43987

19-29 Woburn Place, LONDON, W.C.1

Phone: TERminus 2877 (10 lines)
Wires: Warmth, Westcent, London



PLANS...for posterity

Steel is a home product, and steelwork will lend its strength in the building of our homes, our offices and our factories.

This concentrated strength saves space and gives freedom of architectural design to every kind of building, from the farm-labourer's cottage to the multi-storey block of flats.



Our collaboration is at your disposal.

The British Steelwork Association



TEMPLE AT PHILAE
ENTRANCE COURT SHOWING PYLONS

JOHN LAING & SON, LTD.
BUILDING AND ENGINEERING CONTRACTORS

MILL HILL, N.W.7
DALSTON ROAD, CARLISLE

Established 1848

TELEPHONES : MILL HILL 3242
CARLISLE 1820

